



STATE CAPITOL BUILDING

Fifteenth Biennial Report
OF THE
Department of Agriculture
OF THE
State of Florida

Divisions of Agriculture and Immigration

PART 1

FOR THE YEAR
1917-18

W. A. McRAE
Commissioner
Tallahassee, Florida



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**COUNTY MAP
OF
FLORIDA**
SHOWING SUBDIVISIONS

NORTHERN DIVISION

CENTRAL DIVISION

SOUTHERN DIVISION

WESTERN DIVISION

Counties shown: ALACHUA, BAKER, BAY, BROWARD, CALHOUN, CLAY, COLLEGE, COLUMBIA, DALLAS, DE SOTO, FLORIDA, GADSDEN, HAMILTON, HERNANDO, HILLSBOROUGH, JACKSON, LAFAYETTE, LEON, LEVY, LINCOLN, MANATEE, MARION, MICHIGAN, MONROE, NASSAU, OKLAHOMA, ORANGE, PALM BEACH, PASCO, POLK, PUTNAM, RALPH, SANTA FE, SEMINOLE, TAMPA, TAYLOR, THOMAS, TOLSON, TRAVIS, WALKER, WASHINGTON, WILCOX, WILSON, YALOWA, ZEPHYRUS.

LETTER OF TRANSMITTAL.

DEPARTMENT OF AGRICULTURE, STATE OF FLORIDA,
COMMISSIONER'S OFFICE.

To His Excellency,
Sidney J. Catts,
Governor of the State of Florida:

Sir:

As provided by law, I herewith submit the Biennial Report of the Department of Agriculture for the years 1917-18. The dates upon which the agricultural, horticultural live stock and industrial statistics are based cover the period from July 1, 1917, to June 30, 1918, inclusive. The Industrial Reports are for the year 1917. All other Divisions are for the two years 1917 and 1918.

Respectfully submitted,

W. A. McRAE,
Commissioner of Agriculture.

PREFACE.

In the publication of a report like this, to get the best results, we find it necessary to present each branch or division of the Department separately, treating each subject or division separate and distinct from the other. We therefore publish the report of each division under separate cover, except in the case of this volume.

In order that the public may realize the magnitude and importance of the work of the Department of Agriculture, we give below an outline of the duties of the Commissioner of Agriculture.

1. Division of Agriculture.
2. The Division of Immigration.
3. The Prison Division.
4. The Pure Food and Drugs, Stock Feed and Fertilizer Division.
5. The Land Division.
6. The Field Note Division.
7. Shell Fish Commission.

In addition to the above the Commissioner of Agriculture is a member of the following Boards:

1. The Board of Commissioners of State Institutions.
2. The Board of Pardons.
3. The Trustees of the Internal Improvement Fund.
4. The Board of Drainage Commissioners.

VOLUME I
DIVISION
OF
AGRICULTURE

DIVISION OF AGRICULTURE

By H. S. Elliot, Chief Clerk, Department of Agriculture.

Article 4, Section 26, of the Constitution, provides that "The Commissioner of Agriculture shall perform such duties in relation to Agriculture as may be prescribed by law, shall have supervision of all matters pertaining to the public lands under regulations prescribed by law, and shall keep the Bureau of Immigration. He shall also have supervision of the State Prison and shall perform such other duties as may be prescribed by law."

CHANGE IN FORM OF PRINTING REPORT.

This, Volume No. 1, contains the report of the Divisions of Agriculture, and Immigration only. The Manufacturing Schedule also is in one Volume—No. 2, the other four divisions being also contained in separate publications. This is made necessary by the greatly increased amount of work of the Department and to facilitate handling through the mails. If the work of all divisions of the Department were published in one book, it would be so unwieldy as to make it too heavy for mailing, as well as wasteful, because necessarily a lot of matter would have to be sent to enquirers that is not requested. A considerable saving in expense is gained by publishing the report in separate form. Copies of the reports of any one of the Divisions may be had on application.

The financial statement of the Department is also published in a separate form.

The following statements will serve to convey some idea of the work performed by this Department in connection with the discussion of the subjects that follow throughout this work.

It must be remembered that the period covered by this report was the most intensely interesting, of any in the history of America, and that conditions were rapidly and continually changing, and increases and decreases were many and varied.

Number of letters written on Agricultural, Industrial, Immigration and numerous subjects, incidental to the work of the Department, approximately	30,000
Number of maps distributed to applicants by mail for the two years 1917 and 1918.....	20,000
Number of pieces of mail matter containing printed information sent in reply to inquiries concerning the State, over.....	254,000
Number of Quarterly Bulletins used in Immigration work and mailed to applicants on request beyond the State; over	41,000
Number of Quarterly Bulletins mailed to regular subscribers (no subscription fee)....	58,500
Number of express packages handled by this division	1,000
Number of packages by registered mail, over...	2,000
Number of telegraph messages received and answered, approximately	750

Just reading over the bare statements and figures above made, conveys no conception of the vast amount of work required to properly direct and perform the duties entailed upon the office by the varied character of the demands for information.

This does not include the work of gathering and compiling the Agricultural, Industrial and other Statistics of the State, nor the preparation of the vast quantity of matter for publication in various forms with which to meet the ever increasing demand for information in a more or less detailed form, which will be found on the pages that follow. Applications on these subjects have greatly multiplied since the war closed.

GENERAL AGRICULTURAL MATTERS.

Discussion of Numerous Subjects.

By H. S. Elliot, Chief Clerk Department of Agriculture.

The progress and advancement made by our State in the lines of agricultural and industrial development during the two years just passed has surpassed in many respects all previous years. There have been decreases, but the increases have far outweighed the losses, and when we take into consideration the fact that within the short period covered by this report the greatest war in the world's history has been fought to a successful issue we have just cause for pride and wonderment. But we have still greater cause for wonder and admiration at the momentous results in agricultural achievement wrought by the farms of America.

In all of this great work our State did its part. In some branches of agriculture, farmers surprised themselves at the result attained. Men for the first time took seriously to the better methods of farming and found that better farm practice meant higher production. Such crops as wheat, rye, rice were grown as never before and all other grain crops were doubled and trebled. So with sugar cane, sweet potatoes, peanuts, etc.

The war necessities as well as inducements brought home to the farmer as never before, the realization of the value of the use of scientific methods in agriculture, and this in turn taught him that with the right kind of management, there was and is practically no limit to the yielding capacity of our soils; and so we say again, that as agriculture is the oldest industry, so is farming the greatest science in the world. Yet too often have the tillers of the soil lost sight of the scientific features of farming, thereby depleting their lands through continued

practice of worn-out methods that should have been long since discarded from consideration.

A diversity of soil crops and an increase in the live stock industry to the extent that the farms are made self sustaining, will work wonders in the restoration of depleted soil conditions. It will do more—it will demonstrate beyond doubt that the only road to profitable farming lies in the diversification of crop production and the raising of live stock, and it is morally certain to create a more modern system of farm management along the lines suggested. Certain it is that, cattle and hogs or other marketable live stock are just as visible and tangible an asset as goods in the warehouses or on the trains. Credit based on cattle and hogs is fully equal to credit based on bills of lading. Also to grow live stock means success on the farm, regardless of the boll weevil, unfavorable weather or other crop failure.

Live stock means the building up of the soil and an increase in farm profits. Live stock growing will keep people on the farms, it will do more, it will enable men to become farm owners and good contented citizens, who of necessity become the implacable foe of Bolshevism, Anarchism, Socialism, I. W. W., etc., for no man with property and a family can affiliate with fanatics. Their object in life is diametrically opposite and impossible of copartnership. The one means civilization and progress, the other hell-born destruction, misery and woe.

The growing of live stock means to live on the farm, make a good home, have good schools, good roads, and productive soil. It also means raising what you feed and feeding only what you raise. It means diversified farming, the profitable kind, which brings plenty, happiness and contentment. Reverse this proposition, and we have scarce money at high interest, a struggling people with shabby homes, farms without necessary animals or proper implements, mean roads, second rate teachers, and fanatical tramps to sow the seed of Bolshevism.

Undoubtedly land ownership is the greatest safeguard of our country. The comparatively near future will almost certainly prove it. It is the best assurance of happiness and content in mankind. It is said "That Nation which best loves the soil and which lives closest to the soil is the happiest. It was so in the beginning—it is true today." The strong time in the life of every nation has been marked by the excellence of its agriculture and the great number of men and women owning and engaged in the cultivation of the soil. This ownership question has been so clearly allied with our daily life and still bears such close relation to our very existence, that in our familiarity with the subject we have overlooked its national and political importance and have given it little serious thought. The time for this carelessness has passed. To continue this policy is to invite disaster.

The closer we are to the soil, the longer will be the generation of our people, and the strength of our institutions become unassailable. Thus the future hope of our State may safely be measured by the number of its land owners. Therefore become a soil owner. Millions of acres of eutrope lands suitable for all purposes are awaiting occupancy and development. There is no better field for agricultural development than is here presented or can be found in any country. No other surpasses Florida, more than that, no other State equals it in opportunities for profitable investment, the comforts of life, health and happiness.

Therefore, let us place people on our present unoccupied lands as a guard against future evil and turn threatening conditions into a bulwark of Liberty.

Reverting to live stock, we suggest that draft horses, including mules, be not overlooked. For years this class of stock has been of immeasurable importance to the farmer and in spite of tractors will hold their own—they are a necessity and always will be.

The day is at hand when European Nations will be demanding them in large numbers. We therefore suggest that in growing of live stock for farm purposes, the draft animals be included—Percheron horses and mules will fill the bill. Their sale in foreign countries will in the near future demand all that America can produce for many years to come.

IMMIGRATION.

A synopsis of the detailed work of this Department appears on previous pages, and indicates clearly the volume of work transacted through this Department in the work of Immigration. There is no separately established Bureau of Immigration charged with the duty of caring for the business. The Constitution requires the Commissioner of Agriculture to keep the Bureau of Immigration, but in the absence of specific clerical help, this work must be and is performed by the clerical force of the Department of Agriculture. Additional help should be provided, and a Bureau of Immigration properly equipped and with the proper safeguards, would, we believe, be of great advantage to the State in the near future, but we want no Huns, Bolshevists, Anarchists, Socialists, I. W. W., or any of this class of people from any foreign country nor from the other states of this Union. We have one race problem on our hands, we do not want another.

A WORD OF CAUTION TO INVESTORS.

To those persons who are contemplating a removal to Florida we suggest a few words of caution, and advise them that, before they make any purchase of lands, or even enter into any contract to purchase, that they first pay a visit to Florida and make personal investigation of the lands offered them. No matter who it is that

makes the tempting offer, make them wait until either you can investigate personally or through some undoubtedly reliable source. There is no scarcity of land in Florida. Millions of acres of good lands are still here to choose from. Unless this course is pursued there can be no certainty that the interested homeseeker or investor will get what he wants. But see what is offered first, is our advice, then you will know what you are getting and your choice is likely to be satisfactory. Besides, it is due to both buyer and seller that common sense methods and proper business precautions are observed.

METEOROLOGICAL REPORT.

This report is one of great value as well as interest to the people of our State, and particularly useful to the thousands of persons who are contemplating a change of residence to Florida or of making investments in the State.

The weather service is, at all seasons of the year, a great protection to the farmers, vegetable and fruit growers of the State through its system of storm and temperature warnings, as well as to those engaged in ocean commerce. It is also specially worthy of publication for the history it makes relative to the meteorology of the State. It supplies information of a character that is constantly increasing in demand and which cannot well be obtained by or distributed to those wanting such information as when given publication in our official reports. The report for 1915 follows the Agricultural Statistical Report for 1917-1918 further on in this work.



Orange Grove.

FLORIDA—A LAND OF OPPORTUNITIES.

It is said that opportunity knocks at the door of every man once, but if not seized upon immediately passes on and is known no more.

An old adage also says that there are exceptions in all cases, therefore I shall briefly attempt to point the exception in the case, as it relates to Florida.

GEOGRAPHICAL POSITION

From its geographical position being in the same latitude as the Northern half of Mexico and Southern China, it is natural to suppose that the climate is hot, but its comparative degree of heat is not accurately indicated by its latitude, because the temperatures that might be expected from its geographical position are controlled in great measure by its peculiar shape, bringing the whole surface in close proximity to the ocean currents, which influence to a great degree, its entire climatic conditions. The narrowness of the State and its consequent exposure to the fructifying influence of the balmy ocean winds, produces a pleasantness and salubrity of climate, and a power of vegetable production, truly wonderful.

Throughout the history of the world, experience has invariably shown those countries blessed with water facilities for travel, transportation and commerce, to be the ones which accumulated the greatest wealth; were prosperous and progressive. Florida has these facilities to a greater extent than any other State, for practically all her territory is in close touch with the commerce of the ocean, through her harbors, where her products may be transported to other climes or exchanged for wares from other parts of the world.

CLIMATE

Climate, taken in its general sense, indicates all the changes in the atmosphere that sensibly affect our organs, as temperature, humidity, fluctuation of barometer, pressure, quietness of the atmosphere, winds, direction, forces and action, purity of the atmosphere and its admixture with vapor, or noxious exhalations of gaseous matter, transparency and clearness of sky in its relations to radiation of heat, to the organic development of plants, etc., also with reference to its influence on the feelings and mental condition of mankind.

In relation to these manifold elements of climate, Florida occupies a most favorable position, for the modifying influences in operation have produced a climate, that for equability has few if any equals, and no superior. As regards temperature, continued observations in various parts of the State show that it is not excessive in either extreme during the entire year, the range between winter and summer temperature being only about 20 degrees. The annual mean is about 70 degrees; that of spring about 71 degrees; summer, 80 degrees; autumn, 71 degrees; winter, 60 degrees.

The main portion of the area of the State is peninsula in character and stretches away south to the borders of the Torrid Zone. If we divide the peninsula at the 28th degree of latitude, in two parts, by a line across the State, east and west, we find that the difference between the summer and winter temperature is less south, than north of that line. This is owing to the sun imparting to southern latitudes less heat in summer and more in winter than to those further north.

Also, since the temperature falls as distance from the Equator increases, one degree of depression to every added degree of latitude, and since moreover, the thermometer falls one degree for every 300 feet in altitude, and Florida being so near the Equator, and so little

above sea level, is likely to be thought a very hot country. Other causes also conspire to give Florida a climate remarkable for its equability—so far as temperature is concerned. There are many rivers and smaller streams which course the surface; also innumerable lakes, many of which are large, and of great depth.

The evaporation from these streams and lakes, and from the Gulf of Mexico on one side, and the Atlantic Ocean on the other, rapidly absorbs and dispels the heat of the sun, just as rain upon the hot ground absorbs the heat and cools the atmosphere; this process is quite rapid. because as the vapor rises, absorbing all the heat it can possibly contain, the oceanic breezes waft it away and supply other atmosphere to absorb more vapor in its turn, thus performing the same office in the cooling process. Thus, the truth is demonstrated that the thermometer rises higher in the latitudes of New York, and Boston, or St. Paul, than in Florida; this holds good in any comparison made between Florida and any State lying north of it.

Another point to be considered when looking for the causes of higher temperature in states north of this, is the fact that the days in summer are longer as we go northward, and the nights are shorter; consequently there is less time for throwing off or radiating the heat from that the sun that accumulates during the day.

SOILS.

The soils of Florida may be said to belong to the Coastal Plain, and therefore are more or less alluvial in their nature, and are of the sandy and clay loams in classification.

They are locally classified as first, second, and third rate pine lands, and high hammock, low hammock, swamp, and prairie lands. These designations are given them because of the character of the timber and other plant

growth; as also soil conditions. Some require drainage of course; others do not; but it is their alluvial nature that adds to their fertility and productivity. The soils of the Coastal Plain are the most fertile and productive in the eastern U. S., with few exceptions, and it is here that Nature steps in and with lavish hand, makes possible with unlimited opportunities the enjoyment, occupation, and welfare of the human race.

The bestowal of these gifts upon man was as a blessing from high Heaven, sent by an all-wise Providence for the purpose of ameliorating the worldly condition of mankind. There is but one Florida.

Know ye the land of the cedar and vine,
Where the owers ever blossom and the beams ever shine?

Where the light wings of Zephyr, oppressed with perfume,
Wax faint o'er the groves of the citrus in bloom?

Where the orange and citron are fairest of-fruit,
And the voice of the mocking-bird never is mute?

'Tis the clime of the East—'tis the land of the sun!
'Tis Florida, the fabled land of song and story, the
"Eden" of Atlantis, the gem of America, the flower of the
Southland!

Her climate offers health and happiness to all classes of humanity, the rich and the poor alike, and with it the opportunity for personal and industrial independence. In no other clime in all the world has Nature bestowed upon her people with such lavish hand her choicest gifts. Nowhere else in the world are the fructifying rays of the sunshine and the rain so evenly distributed throughout the seasons of the year.

Florida's climate must be recognized as one of the Almighty's greatest gifts to the State of greatest opportunities; its sunshine is more valuable in the laboratory

of nature than all the gold ever dreamed of by the alchemists of old. It is the magician of the fields, the orchards, the groves, the forests, and the maintenance of all life.

In winter it ripens the golden fruits; in spring it makes possible the condition that transforms Florida into a veritable cornucopia overflowing with all the delicacies of a fertile, productive soil. Nor are we confined alone to the native products, for on every hand are seen exotics of the far East; fruits and plants of the temperate zone; of the tropics and semi-tropics of both hemispheres.

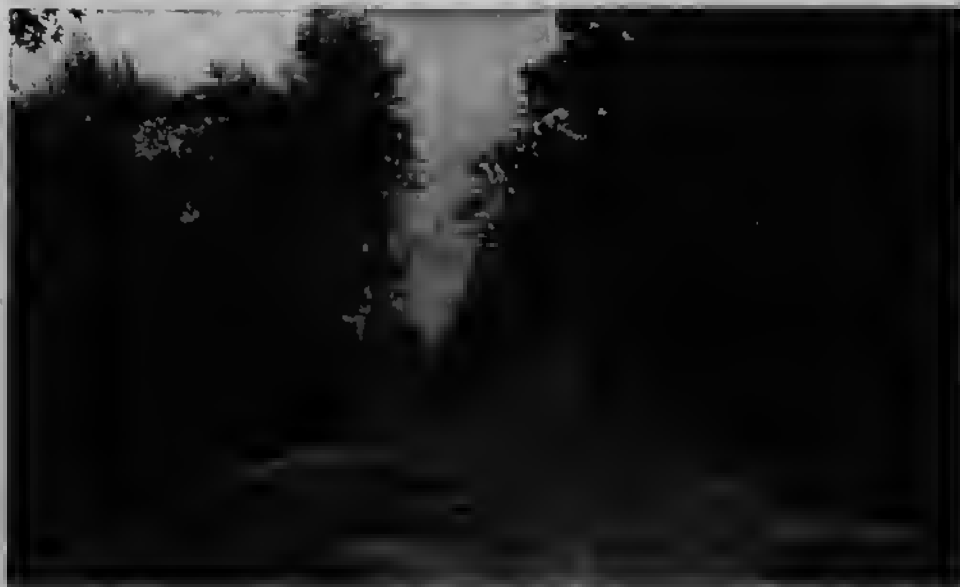
GEOGRAPHICAL POSITION—COMMERCIAL

In its geographical position with regard to her future possibilities for ocean commerce, no state in the South can equal, and no state in the Union surpass her, in these facilities.

There are not less than nine spacious harbors of the first class; as many more of the second class; and innumerable smaller harbors—all capable of caring for thousands of vessels aggregating millions of tonnage through all seasons of the year. These facilities offer *Opportunities* without limit to ocean traffic with all countries of the world.

Our harbors are accessible at all seasons of the year: no "Titanic" disasters are possible, and our routes of sailings are as direct as from the ports of any state, or states, on the Atlantic or the Gulf, whether to the countries of the East, West, or South, as the case may be.

With shipbuilding industry, as it is, being fostered at numerous points in the State, every harbor offers hundreds of opportunities for either foreign or coastwise trade. Florida should control vast amounts of trade with the countries to the South. Our harbors and interior facilities make this entirely possible. These won-



Dixie Highway.

derful *Opportunities* are within our grasp today. Shall we seize them? Or shall we let them pass to others while we look on passively?

Let us not forget that the records of the world's history shows that the countries which have dominated the peoples of the earth and their destinies have been, and are today, the maritime nations. The people who put all their faith and works in the land alone can never lead; they can only follow. Therefore they play a minor part in the affairs of the world. Let us wake up to our opportunities, for they are endless.

OTHER OPPORTUNITIES

In this connection some comparisons of the present with the past may be of interest—going no further back than 1880, about the time when Florida began to attract attention, though in a small way and chiefly because of her climate.

In 1880 the United States census gave Florida a population of 269,493; in 1915 the State census, which is the latest one, gave her 921,618, or an increase of practically 400%.

INDUSTRIAL

(All quotations from census in this article are for the year 1880, U. S., and 1915, State.)

In 1880 there were but 426 manufacturing establishments of all kinds in Florida; in 1915 these were increased to 5,175. In 1880 capital invested was \$3,725,000; in 1915, \$67,611,774. In 1880 wage earners employed numbered 5,504; 1915, 64,235. In 1880 amount of wages paid these people was \$1,270,875; in 1915, \$29,653,734. In 1880 value of products of these establishments was \$5,546,448; in 1915, \$68,668,656. Note that the values here given are *exclusive of the cost of production*.

Here are *opportunities* without limit for any man or number of men, for there can be no limit to the wealth of a manufacturing community when it can and does produce the commodities in demand by the public. That this State can supply all demands is but a question of effort; she has the timber resources surpassing any other State; she leads in all classes of timber, having over 247 distinct varieties of timber adapted to commercial purposes and the number of varieties would reach near 300 if all were included.

Nor is this all industrially; it is well known that Florida is rich in fiber plants exclusive of cotton. There are over 20 distinct fiber plants of real commercial merit that thrive in the several sections of the State to which each is best adapted. In these products there are opportunities at least equal to those offered in Mexico and Central America.

The growing of fiber plants and their manufacture into cordage should be done in Florida; the time is near when the demand will far exceed the supply; our hinder twine for harvesting purposes; rope for marine purposes; fiber for the various qualities of bagging, and other coarse cloths are in growing demand, but unavailable in necessary quantities. Truly, industrial art is the handmaid of agriculture.

AGRICULTURE

Agriculture in its several branches probably offers to the average man the greatest *opportunities*. This is indicated by a comparison of its more recent development with the past.

It is not generally realized even by our own people that Florida leads all other states in the number each of the three classes of soil products considered essential to the welfare, happiness, and prosperity of each man, but it is nevertheless true; these classes are, First: what

is known and designated by the trades as standard crops of which there are 30 distinct kinds used as food for man and feed for live stock.

Second: There are twenty-five varieties of vegetables used by man and domestic animals as food, and as staple commercial products, and always in demand.

Third: There are more than twenty varieties of fruits each in demand in its season in the markets of the world. Here then we have nearly one hundred soil products, which cover the whole range of food for man and beast. For every item that goes to make up each of these several classes of products, there are many opportunities; for every product will be better for higher development in the utilization of opportunity.

But here is the evidence: note the contrast. In 1880 there were 23,438 farms in the State of all sizes, valued at \$20,291,835; in 1915 the 55,000 farms were valued at \$188,300,000.

The value of standard crops in 1880 was \$5,430,393, and in 1915 their value was \$21,613,300.

In 1880 there were no *vegetable crops grown for commerce*, but in 1915 the vegetable crops were valued at \$10,724,519.

In 1880, the fruit crops were valued at only \$285,356, and in 1915 they were valued at \$13,511,950.

In 1880, the live stock on these farms and the ranges, was valued at \$5,358,980, and in 1915 it was valued at \$29,869,842. In 1880, the total dairy products of the State were valued at \$99,137, while in 1915 they were valued at \$3,881,462. And so the contrast grows; and with it grow the opportunities in every case.

Divide these items into separate units and in every one a multitude of opportunities present themselves. The ability to choose and the will to direct the effort, will bring success as a reward.

But this is not all that knocks at the door of oppor-

tunity in Florida and that waits on clear heads and willing hands for profitable development.

There were no phosphates, Fuller's earth, kaolin, etc., known to exist in Florida in 1880; but since 1890 the discovery of these minerals has yielded approximately \$217,843,143, and opportunities for further discovery are by no means exhausted.

Through her phosphate deposits, the greatest in the world, Florida has and is today supplying the world with a fertilizing material that is essential to successful agricultural development in every land.

FISHERIES

There is perhaps no single industry in Florida of such vast economic importance and one that offers greater opportunities for profitable investment than fisheries. With approximately 1,200 miles of sea coast, and innumerable bays, lagoons and other water courses filled with fish of almost every kind, Florida possesses natural advantages to a greater degree than is enjoyed by any other State.

The varieties so far enumerated show 34 distinct kinds of food fish in Atlantic waters, and 54 in the Gulf of Mexico. In addition there are 14 kinds of shell fish fit for human consumption. These lists do not include a number of large, deep sea fish only recently declared to be edible by the U. S. Government, and while I can say little for the eating qualities of these fish, they can and should fill a place in commerce as important and valuable material in the manufacture of oil and fertilizer products. In this industry then there are also opportunities for most profitable employment of both capital and labor—opportunities as yet neglected and unappreciated except in a limited way.

CONCLUSION

"There is a tide in the affairs of men,
Which taken at the flood,
Leads on to Fortune."

In conclusion, we have no hesitation in claiming that there is no section of this country with resources so varied, none presenting such a field for new and promising enterprises, none that offers to the rich and poor alike the gifts of nature in such lavish form, as Florida; because we base that assertion upon firmly established facts.

We claim that Florida is the healthiest State within the U. S. and we have the proof that it is so; we have asserted that the climate of Florida is unsurpassed by that of any country on this globe, and we have given the scientific reasons for saying it. We have described the character of our soils, and given the reason of their fertility, and their peculiar features, which make them lasting and valuable over all others; we have offered a list of the products of these soils and shown their adaptability to conditions, and their value from a pecuniary standpoint based on results; in the timber resources of the State we have shown that our State stands without a peer on this continent in the value and varieties of timber for economic purpose. We have shown the almost unlimited possibilities of Florida in an agricultural, horticultural, and industrial sense, and the open road to wealth that lies before the industrious farmer and live stock grower, and we have submitted the proofs. We have shown in a manner that leaves no room for doubt the wonderful future that lies before our State in a commercial respect; and with a railway already stretching away to the southernmost end of the State and Continent overseas, connecting with the "Gem of the Antilles;" and when the waterways of the State now in construction,

are completed; when a system of commercial intercourse and trade is established with our Sister Republics to the south of us; then, will the great stream of traffic flowing down from the almost limitless interior, seeking an outlet to these new-world markets in other lands, tax our harbors to the utmost. Then will our claim of boundless opportunities be substantiated.

Further we will have shown in connection with this possible commerce system, the unequaled inducements and opportunities for the establishment and successful operation of countless manufacturing industries.

Florida is in very truth a *Land of Opportunities*, where all who are honest and energetic can make life a success.

Particularly is this applicable to the younger generation of men, also "That in the bright lexicon of youth there is no such word as fail." Opportunity is inviting your acceptance; but he who hesitates will lose.

Again we say to such people the fertile soils of Florida offer unparalleled opportunity. These are the people to succeed; accustomed to the problems of soil work, they are the men who can utilize the forces of nature and make them yield obedience to their will. Men possessed of willing hands, resolute hearts, and level heads, were never presented with a finer field for occupancy than Florida. It is a field boundless with the best elements of wealth and substantial enjoyment. It has an endless quantity of raw material of every sort, and rich productive soil, upon which all the fruits, all the crops, and all the animals necessary for man's subsistence, comfort, and convenience can be cultivated and propagated; and withal a climate that brings back to the pallid cheek the glow of health; to the listless eye the sparkle of new life; transforms the careworn frame to one of reanimated nature; brings rest to the wearied mind; and takes from the memory of adversity the sting of distress.

THE HOME GARDEN AND ITS ADVANTAGES

(By W. A. McRae, *Commissioner of Agriculture.*)

In 1916 I gave to the press of the State an article entitled, "Why Not the State Beautiful?"

In this article I stated, among other things:

"Florida is rich in its variety of trees, shrubs, vines, ferns, herbs, sedges, grasses and mosses. No State in the Union equals it in floral wealth.

"Many of our trees, shrubs and plants bear flowers, glorious in color and fragrance, each month and season having its share, making a constant procession of floral beauties along the path of the year.

"In the winter season when the rivers and lakes of the North are covered with thick ice and the ground blanketed with snow, the Wistaria vine in Florida clammers over our porches and trees and freights them with masses of pennants bewildering in number and beauty. And roses, too, of infinite number, sizes and color, are in bloom at Christmas time—if they are given a chance to grow. And it's in the winter, too, that the orange tree is in height of bloom and fills the air with indescribable fragrance.

"Then, in turn, comes the oleander and then the magnolia, with a blossom having no rival for splendor among the trees of America, accompanied by its prototype—smaller but no less beautiful—the cape jasmine, and just at this time the crepe myrtle shrub is a vision—each a massive bouquet.

"Florida has over two hundred kinds of deciduous green trees of commercial utility—many more than any other State—and countless shrubs and vines, with herbs conspicuous when in bloom, but very inconspicuous or practically invisible at other times.

"There are trees growing in Florida not known to botanists anywhere else in the world, and found native only

on the east side of the Apalachicola river. These are the *Torreya taxifolium*, or stinking cedar—and *Taxus Florida*, both very attractive evergreens. A fine specimen of the first named is to be seen on the grounds of the State Capitol at Tallahassee and in several of the parks of Jacksonville.

"Besides the native flora of the State, ranging from lichens to palms and mammoth cypress and oak trees, there will be found great areas greatly modified by civilization, such as new and old fields, roadsides, dooryards and railroad rights of way. Some of these minute but charming creatures of nature in their struggle to reach out to the skies for 'a place in the sun' for their share in the air, not only that they may thrive and silently teach the lesson of the beautiful hut to tempt man to utilize them, are native varieties which and other branches of tree and plant life. Let us make Florida the 'State Beautiful.'

"Where the birds sing sweetly."

—(even at night);

"And the flowers ever bloom."

—(and in plenty);

"Where the roses and the orange"

—(none finer);

"Send out rarest of perfume."

"Everybody can help. The federation of women's clubs is doing a notable work, setting an example for the men folks, in promoting the science of forestry, and beauty. Among its achievements is the creation of what is known as the Royal Palms State Park, an estate of some 2,000 acres in Dade County, southwest of Florida City, containing perhaps the finest collection of royal palms, some of them a hundred feet high—to be found in this country, besides fifty or more varieties of other semi-tropical trees, in all a veritable wonderland. It is planned to make it a game reserve and a bird sanctuary, and many kinds of birds are already under protection.

"Not only has this federation established a wonderful park, but it has been active in every direction in the matter of beautifying the State, a work which has foundation in doing the small duties about us. Let me quote from a circular sent out at the beginning of the year by the civics department to all members in which the following duties were suggested:

"1. Observe Statewide clean-up week—April 10-15, and October 9-14. (Why not clean up every day a little of the time)? ,

"2. Destroy breeding places for flies and mosquitoes.

"3. Give special attention to colored districts.

"4. Inspect markets, fruit and grocery stores.

"5. Beautify school and railroad station grounds.

"6. Fight unsightly billboards and street scattering of advertising matter.

"7. If you have no junior civic league, organize one and have the members plant seed. Mrs. J. W. Sample, of Bartow, Fla., is chairman; write her for information.

"8. Post the enclosed card in every school house.

"9. Progress calls for community civics taught as a text in the public schools. Have your civics chairman interest school authorities in this very important work. Along with this introduction comes humane work, both for the protection of children and animals.

"10. Take pictures of unsightly places that may be beautified or improved, and at the end of the federation year take another one showing improvement.

"11. Let everybody in Florida co-operate and work to make Florida worthy of the name, 'Land of Flowers,' by planting and beautifying.

"As your community, so your State.

"Getting down to brass tacks, as Kipling says:

"It isn't the guns nor armament nor funds that they
can pay,

But the close co-operation that made them win the day.



Multiplying Sunflower.

It isn't the individual, nor the army as a whole,
 "But the everlasting team work of every bloomin' soul."

The article above referred to was very generously published by the press of the State, and many favorable comments were made, and the Department of Agriculture was signally honored by its appearance as the leading article in the publication of the Federation of Women's Clubs.

When the Great World War brought strikingly home to us the fact that we should all do our part in every way we could, and that the "home garden" was a necessity, I did all that I could by writing and speaking to urge our people to greater activity along this line, and I fairly believe the number of home gardens increased a thousand fold in this State during the four years of the World War.

The year 1918 was not, on the whole, a good garden year, but I made a large quantity of vegetables from the small space I could use for the garden, and in every nook and corner of the yard I had something growing, either vegetables for the table or flowers, to add beauty, where weeds and grass might otherwise grow.

Following up the idea of the home garden, I have written the following article, illustrated, and this will become a feature of future reports:

THE GARDEN AND ITS ADVANTAGES

When God made man he was placed in a garden to cultivate and keep it. The garden was well filled with trees bearing fruit, and intermingled were many humbler plants, each playing its part in supplying the occupants with things for their sustenance and comfort.

The first man neglected his opportunities and all along the centuries to the present hour men have ignored the early command of the creator to make a garden and keep it.

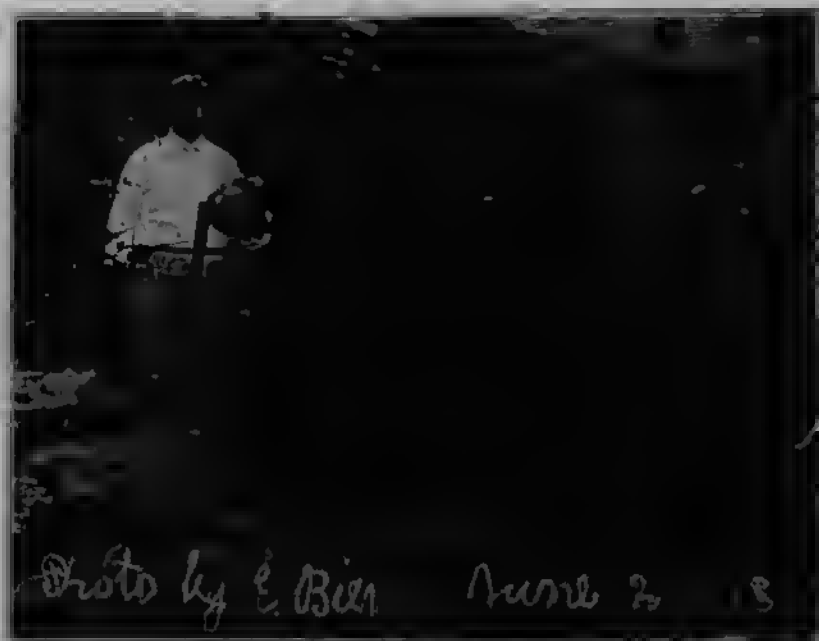


Photo by E. Bieri June 2, 18

Fruits of the Garden.

If there is a State in the Union where the garden can be made to yield something for the use of man in every month of the twelve it is in Florida. The absence of the garden in town and country in our State or the poorly cared for ones, is evidence that a good many people are disobeying one of the original and fundamental requirements placed upon man by the Maker of the Earth.

The garden was the starting point in the history of man, not a saw mill, nor factory, nor store, nor office. These were after thoughts or adjuncts, and now necessary, but they could not exist without the products of the garden, field and grove. The land is the original source of wealth. The possibilities of a plot of fertile land are surprising when it is properly cultivated. Tons of food can be produced on a single acre. To show what can be grown it is known that 43,000 plants set 1 foot by 1 foot can be accommodated with room for full development.

2 feet by 2 feet will grow 18,800 plants.

3 feet by 3 feet will grow 4,800 plants.

3 feet by 4 feet will grow 3,600 plants.

4 feet by 4 feet will grow 2,700 plants.

5 feet by 5 feet will grow 1,700 plants.

6 feet by 6 feet will grow 1,200 plants.

Gardening was given a great impetus during the trying period of the war as a patriotic measure, but the world is not at ease and it will be a long time before normal conditions can be realized. There is still need of gardening, the world is still hungry. The ability to make gardens successfully means efficient food production, and on efficient food production, naturally and inevitably depends the natural comfort and welfare.

Good seed is just as essential in the garden for vegetables as in the field for cereals and cotton. Some folks disregard this fact, and the result is poor or indifferent crops. They act as if nothing was to be gained in seed selection. If that is so, then all cattle are cattle regardless of breeding and feeding. The Shorthorn, Jersey,



Okra Garden.

Hereford and the Scrub are all the same. This is also true of the hog. The Duroc, Berkshire, Poland China and the razorback would be the same. No one believes this, and yet in the matter of seed many persons are indifferent. The same law of nature holds true in plant life as in animal life. Like produces like.

Our children should be taught the beauties and attractions of the plant creation. No State in the Union equals Florida in its variety of trees, shrubs, vines, ferns, herbs, hedges, grasses and mosses. If we hope to keep our children at home on the farm the home place must be made charming with flower beds and gardens to supply ample and proper food. It has been said that "in the homes of America are born the children of America, and from them go out into American life, American men and women. They go out with the stamp of these homes upon them; and only as their homes are what they should be will our children be what they should be."

The farm and garden can be made to supply food. The meat, milk, eggs and corn of the farm acres and garden vegetables provide every form of nourishment and mineral needed for a perfect body and continued health and vigor.

Startling information came in 1917, when it was shown that more than one-third of the country's young manhood, examined under the selective draft, was rejected for physical unsoundness. Could this have happened if the children had entered manhood in proper condition? If the foundation is not made at home the structure is weak and fails. Good nourishing food and sane regulations in bringing up children in outdoor living and activities would not have shown so many stunted, slouching, stooping, crooked and awkward men. One young man unfit in every three in this the greatest nation on earth cannot be other than a matter of concern.

No one with a plot of ground in a town should think

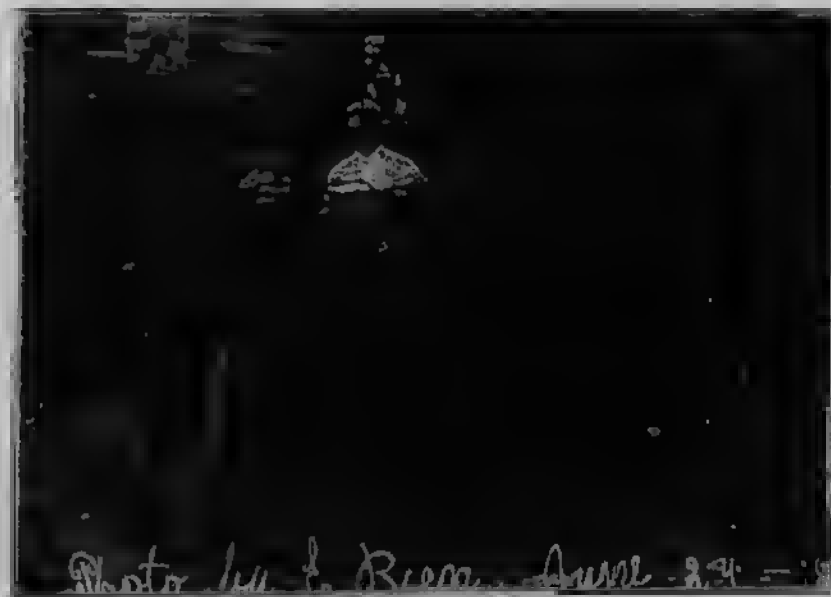


Photo by E. B. Bess. June 24 - 1918

Kentucky Wonder Beans.

that the time and labor given to it in growing vegetables is lost. The same is true of the farm, where the garden can be made the most profitable acre. Vegetables are cheaper and better than fat pork and canned stuff as a regular diet for both children and adults.

Florida, as is known, is one State in which vegetables and fruits of one kind or the other can be had all along the processes of the months. It is only a question of foresight and judgment. No one should depend on one planting of snap beans, radishes, lettuce, sweet corn, etc., but continue at intervals of several weeks apart, so that vegetables can be had fresh, crisp and tender throughout the entire growing season.

Every garden, too, should have a few berries, but it is an exception to find strawberries or blackberries growing on Florida gardens. This form of fruit is not only a most healthful addition to the table when picked ripe from the bushes, but it can be preserved in many appetizing ways. And no garden should be without a fig tree, a fruit as delicious and serviceable now as it was in ancient times, and no other fruit is more frequently mentioned in the Bible.

Nursery and seed catalogues are available to every one, and nearly all of them supply practical information, which applied with good judgment cannot help but serve a good purpose.

One kind of garden not as general as it should be and most desirable, is the school garden, to which the too often neglected and unsightly "yard" might be devoted. Agriculture is always to be the chief industry of Florida. The children should be early taught the importance of plant life and its wonders. Gardening has been advocated in all ages as being of the highest economic and national importance. Working in the garden gives needed physical exercise to adults of the home, as well as the children. With a reasonable supply of tools the labor need not be irksome. Killing weeds should begin just



Squash Garden.

as soon as it is possible to tell plants and weeds apart, and be continued until the vegetables are strong enough to assert their individuality and crowd out the weeds. The work will not be hard if done regularly.

The growing of flowers should be encouraged, but not at the expense of vegetables. In regard to both flowers and vegetables those promising best returns at least risk should be selected. A bouquet on the table from the garden in connection with the vegetables appetizingly and properly prepared adds to the attractiveness of the display of tempting and savory foods.

The school garden could be made of inestimable value to children when managed and conducted in a spirit to encourage competitive interest wherein each participant can have part in a garden fair, to be followed by a sale. Talks can be made on soils, seed selection, planting, cultivation, weeds, insects, birds and the many related features of the work, all necessary facts in the beginning of the business career of the young people of an agricultural State.

To encourage persistent and uniform effort garden photographs may be taken and records kept of the progress made, all of which is part and parcel of any systematic effort.

Accompanying this article will be found a series of photographs made of various features of the garden cultivated mornings and evenings by the Commissioner of Agriculture at his home in Tallahassee. Most of the products in this garden were transplanted from little seed boxes, miniature substitutes for hot houses. These garden plots, which otherwise would have remained vacant and served no purpose, were made really profitable sources of a most excellent food supply—tomatoes, beans, lettuce, okra and many other vegetables, the cost of which bought in the market would have run into a considerable sum of money. There was with it all, besides healthy



State Farm, Ralston.

exercise, the pleasure of planting the seeds, noticing the struggles of the tiny plants to break through the soil for a place in the sunlight and finally towering high into the air gave freely of fruitage for family use.

FEEDING DAIRY COWS

(A Compilation of Information on this Topic by H. S. Elliott, Chief Clerk Department of Agriculture.)

Successful feeding of dairy cows from an economic standpoint involves the providing of an abundant supply of palatable, nutritious feed, at the minimum cost per unit of feed, and supplying it to the cow in such way as to secure the largest production for feed consumed. This bulletin suggests some factors involved in the economical selection of feeds to guide the producer in supplying them to the cows.

LIBERAL FEEDING NECESSARY FOR PROFIT

The dairy cow has been likened by many writers to a machine or a manufacturing plant. This comparison can be applied literally, with certain reservations. A certain proportion of the power furnished any machine is used for running the machine itself and is not in any sense productive. In a steam engine this is represented in the exhaust steam, in heat which escapes without producing steam, and in the friction of the working parts of the engine. In the manufacturing plant it is represented by the managerial, the clerical, and sales forces. These forces, while necessary for the successful operation of the business, are, in a sense, unproductive.

In the feeding of the dairy cow this overhead expense, this unproductive force, is termed the "maintenance ration," and is that portion of the feed given the cow which is used by her to perform her own functions, such as heating the body, pumping the blood, digesting the feed.



Sorghum Waiting at Silo to be Cut—Anthony Farms.

and moving the body from place to place. This feed, from a productive standpoint, is entirely lost to the farmer. The cow can produce without loss of body weight only after she has exacted this toll of maintenance. Having received feed enough to maintain her, practically all the feed she consumes above this can be used for milk production. This maintenance ration is a fixed charge, and the more feed a cow can consume above that required for maintenance the greater the amount available for production.

Feeding for profit can, therefore, be defined as liberal feeding, to the full capacity of the cow. This point is illustrated by Table 1. (These figures are only approximate but will serve to illustrate the point.)

TABLE 1. *Approximate proportions of cows' feed required for maintenance and available for milk production.*

Cost of ration.	Cost of maintenance	Available for milk production.	Proportion of ration available for production.
<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	
10	10		
15	10	5	One-third.
20	10	10	One-half.
25	10	15	Three-fifths.

It will be noted in Table 1 that when the cow is fed only a maintenance ration no feed is available for milk production; when she is fed twice this quantity, half the feed can be used for milk production; when she is fed two and a half times the maintenance, three-fifths of the feed can be so used. One of the most common mistakes in the feeding of dairy cattle on our farms is that the good cows are not fed a sufficient quantity of feed above that required for maintenance. This is especially true of the highly specialized dairy cow; that is, the cow which when fed all she will take makes it all into milk

except what is needed for maintenance. It is, however, unfortunately true that all cows in the dairies of the country are not this kind. Some cows when fresh make all the feed above maintenance into milk for a period of several months before they begin to lay on flesh; others, if fed heavily, begin to gain in weight soon after freshening. From the standpoint of economical milk production one can not generally afford to give a dairy cow more than she will consume without gaining in weight. There are times, however, when it is desirable to make exceptions to this rule; for example, practically all highly specialized milk producers in the early part of the lactation period lose in weight; that is, they produce milk at the expense of their own body flesh. When such cows approach the end of their milking period they normally regain the flesh they have lost in the early part of this period. The feeder can, therefore, well afford to feed such cows liberally, being assured that the feed will be returned to him in the form of milk when the cows again freshen.

SUMMER FEEDING

The problems involved in winter and summer feeding are so different as to make a natural division between the two. Summer feeding ordinarily consists in the use of pastures or soiling crops. These may be supplemented when necessary by silage or other roughage or by grain. When dry feeds alone are fed in the summer, the problems are not materially different from winter feeding.

PASTURE

Pasture is the natural feed for dairy cows, and in many respects the best. With abundance of good grasses in fresh, succulent condition, we have one of the rations most conducive to heavy production. Even with the very best of pasture, however, a cow can not be forced to max-

imum production on it alone. This is owing to the fact that for the greatest production she must be induced to take a large amount of nutrients. The bulky nature of pasture grass places a positive limit upon the capacity of the cow to take feed. In other words, the cow's stomach can not contain grass enough to supply the required nutrients for maximum milk production; therefore a part of the ration should be of a more concentrated nature. Good pasture contains an abundant supply of succulent, palatable, and nutritious grasses. On such pasture it should be possible for a cow to satisfy her appetite with a few hours' grazing. Pasture of this kind will supply all the food material needed for medium production and a large part of that necessary for large production. For average conditions, with ample pasture of good grasses or legumes in good, succulent condition, good production can be secured. The economy of the use of pasture depends chiefly upon several factors, such as the price of land, the price of labor, and the lay of the land.



Holstein-Jersey Steers, Three Years Old.
Weight Average, 1,360 Pounds. Raised on Skim Milk.

PRICE OF LAND

The price of land has a direct bearing upon the cost of pasture and is an important factor where land values are high. If pasture is to be depended upon entirely for from four to six months in the year, and production is to be kept up to a profitable standard, anywhere from 1 to 4 acres or more must be provided for each cow. This is assuming that in permanent pasture there is a good, clean turf, with little or no waste places, and that for temporary pasture there is a good stand of grass or legumes throughout. Land which will give these conditions frequently sells at from \$50 to \$300 an acre, and the interest on the investment must necessarily also vary widely, as is shown in Tables 2 and 3:

Table No. 2—Interest on cost of pasture per cow for the season; interest at 6 per cent on the value of the land, allowing from 1 to 4 acres per cow.

Acres per cow.	Value of land per acre.				
	\$25	\$50	\$100	\$150	\$200
1	\$1.50	\$3.00	\$6.00	\$9.00	\$12.00
1½	2.25	4.50	9.00	13.50	18.00
2	3.00	6.00	12.00	18.00	24.00
2½	3.75	7.50	15.00	22.50	30.00
3	4.50	9.00	18.00	27.00	36.00
3½	5.25	10.50	21.00	31.50	42.00
4	6.00	12.00	24.00	36.00	48.00

Table No. 3—Cost of pasture per cow per day on basis of Table No. 2, with a pasture season of 150 days.

Acres per cow.	Value of land per acre.				
	\$25	\$50	\$100	\$150	\$200
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
1	1	2	4	6	8
1½	1½	3	6	9	12
2	2	4	8	12	16
2½	2½	5	10	15	20
3	3	6	12	18	24
3½	3½	7	14	21	28
4	4	8	16	24	32

It will be seen that the price of land may readily become so high that it would be unprofitable to graze it. In many sections of the country a cow can be fed for average production for about 20 cents a day. Therefore, when the daily rental or interest on the value of pasture approaches that sum the farmer should carefully consider other methods of summer feeding.

The cost of caring for permanent pastures must also be taken into consideration. This will consist in the expense of cutting weeds, building and repairing fences, etc.

PRICE OF LABOR

The pasture system of summer feeding reduces to the minimum the amount of labor required to handle a given number of cows, and, therefore, it is especially adapted to conditions where labor is high.

LAY OF LAND AND ROUGHNESS OF SURFACE

In mountainous or hilly sections of the country there is often a part of the farm which, on account of steepness, tendency to wash, or the presence of rock formation near the surface, can not or should not be plowed frequently.

On such farms it is often best to plow only the bottoms, keeping the uplands in permanent pastures. The dairyman will find ready application of the pasture system for summer feeding on such farms.



Stock-Feeding Shed, State Farm, Raiford.

PASTURE WITH SUPPLEMENTS

GRAIN.

As has been said, the supplementing of pastures with grain is sometimes advisable, even when the pastures are of the best. In many sections, however, pastures are never of the best kind, and in no sections are they always in the best condition. It is evident, therefore, that the commercial dairyman will seldom depend upon pasture alone. Grain should be fed to heavy-producing cows under all pasture conditions.

Prof. C. H. Eckles, of the University of Missouri, suggests the following-named quantities of grain with abundant pasture for varying production:

Jersey cow producing—

20 pounds of milk daily.....	3 pounds of grain.
25 pounds of milk daily.....	4 pounds of grain.
30 pounds of milk daily.....	6 pounds of grain.
35 pounds of milk daily.....	8 pounds of grain.
40 pounds of milk daily.....	10 pounds of grain.

Holstein-Friesian or Ayrshire cow producing—

25 pounds of milk daily.....	3 pounds of grain.
30 pounds of milk daily.....	5 pounds of grain.
35 pounds of milk daily.....	7 pounds of grain.
40 pounds of milk daily.....	9 pounds of grain.
50 pounds of milk daily.....	10 pounds of grain.

While this is, of course, an arbitrary rule and variations should be made to suit different conditions and individual cows, it is in accord with good feeding practice and probably is as good a rule of its kind as has been formulated.

For cows of medium production it is usually more economical to feed silage or some green crop rather than grain for supplementing short pasturage. In supplementing pasture with grain it should be remembered that the percentage of protein in the grain ration need not be the same as for winter feeding. Good pasture is an approximately balanced ration. The grain ration to be fed with pasture grass should, therefore, have approximately the same proportion of protein to other nutrients. In the case of extra-heavy producers the percentage of protein in the grain mixture should be somewhat greater.

The following named mixtures are suggested for supplementing pasture without other roughage:

Mixture No. 1:

Grounds oats	100 pounds	} Per cent digestible protein, 10.3.
Wheat bran	100 pounds	
Corn meal	50 pounds	

Mixture No. 2:

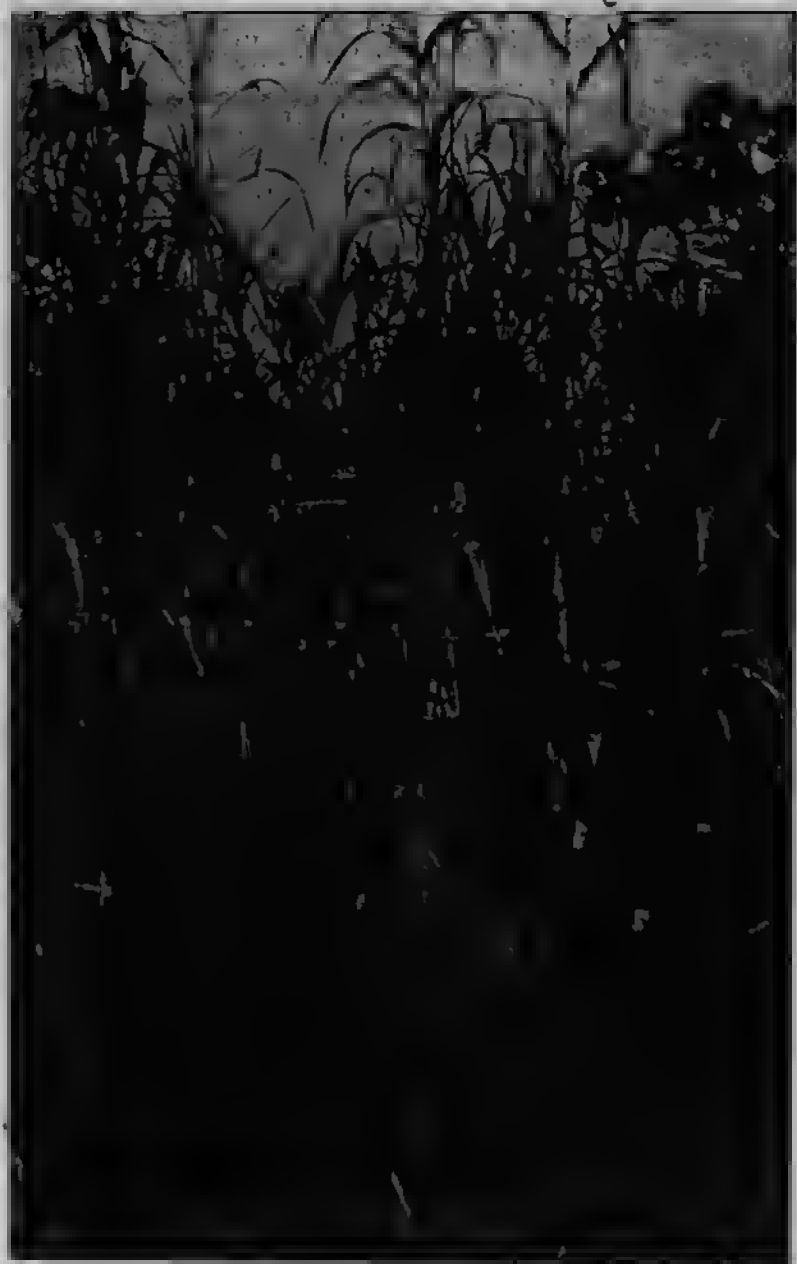
Wheat bran	100 pounds	} Per cent digestible protein, 12.7.
Corn meal	100 pounds	
Cottonseed meal	25 pounds	

Mixture No. 3:

Corn-and-cob meal ...	250 pounds	} Per cent digestible protein, 15.5.
Cottonseed meal	100 pounds	

Mixture No. 4:

Wheat bran	100 pounds	} Per cent digestible protein, 13.6.
Gluten feed	50 pounds	
Corn meal	50 pounds	



Field of Millet.

SOILING CROPS

Pastures, except where irrigation is practiced, are so dependent upon rainfall that there is practically sure to be some period each season when they are short. It is a well-known fact among dairymen that if a cow, for lack of proper feed, falls off in her flow of milk for any period of time it is difficult or impossible to bring her back to a full flow until she again freshens. To carry the cows over this period on grain alone is expensive; consequently, the supplementing of pasture with soiling crops is becoming much more common and is growing in favor. In fact, in many sections it is extremely difficult to keep a herd in maximum production throughout the summer without furnishing some supplemental feed. Unless an abundance of pasture is available, there is practically sure to be a shortage toward the end of the season. Special crops can be grown for these shortages, but they usually involve added expense and inconvenience compared with standard farm crops. Second-growth red clover, oats, peas, or alfalfa are excellent. Corn is available in August and September. These crops are usually a part of the regular cropping system of a well-conducted dairy farm.

The advantages of soiling crops as a supplement to pasture are that large quantities of forage can be grown on a relatively small area, because it is frequently possible to harvest more than one crop in a season on land used for soiling. Another advantage is the palatability and succulence possessed by such crops. With their use pasture need not be crapped so closely and less feed is wasted through tramping by the cattle. By judicious application of the soiling system it is often possible to reduce the acreage of land used for pasture, which in addition to the saving in land required for pasture has the added saving in the cost of fencing. Soiling crops

usually are fed in the stable where the manure can be saved for application on cultivated fields.

An objection which can be urged against the use of soil-ing crops is the greater amount of labor required and the difficulty in using this labor to the best advantage. Another difficulty is to plan a succession of special crops which will at all times during the season supply an abundant supplementary feed. Even with the best arranged plan, its success depends very largely upon weather conditions.



Stock Feeding, State Farm, Ralford.

THE SUMMER SILO.

Silage has found a wide use in this country as palatable, succulent, and economical roughage for use during the winter. Many of the advantages of its use in winter

apply equally well in summer, and there are additional ones that apply alone to the latter season.

The use of a summer silo is particularly applicable on high-priced land. If the land is pastured it will require from 1 to 3 or more acres a season for each cow, while 1 acre of corn put in the silo will supply succulent roughage for several cows for a like period. It is true that grain will be necessary in addition to silage, but the great problem on high-priced land is to raise a sufficient quantity of roughage.

As has previously been said, soiling crops have been used to a great extent either in place of or in addition to pasture. The greatest disadvantage in their use is that much labor is required. In order to use these crops they must be cut and hauled from day to day. This work is expensive because only small areas are cut at one time, thus making it impracticable to use the harvesting machinery of the farm to advantage and entailing considerable loss of time in harnessing and unhitching the team. Considerable inconvenience also is occasioned by the fact that the field work is pressing at that season of the year, and both man and horsepower are badly needed in the fields. Silage, on the other hand, is cut at one operation when the work in the field is not pressing. The crop ordinarily grown for silage is corn, which is a part of the regular farm rotation and consequently fits in well with the regular routine of work.

With a silo for summer feeding, the dairyman always has an abundant supply of feed that is easily handled. By using silage the necessity of cutting and hauling the supplementary roughage during rainy weather is eliminated. Another advantage as compared with the soiling system lies in the fact that with the latter it is often necessary to feed a portion of each crop after it has matured too much to be palatable, and probably to start on the succeeding one while it is still a little too green. It is difficult to plan exactly so as to prevent these con-

ditions. With silage, however, the crop can be cut at the best stage for feeding and preserved at that point.

One of the most important uses of silage in the summer is as a supplement for short or poor pasture. This condition frequently occurs as a result of long-continued dry weather. Under such circumstances even the most carefully planned soiling system may fail. It is then that the greatest value of the summer silo is realized, for with the silo full of well-matured silage grown in the previous season, an abundant supply of succulent feed for the cows is available, regardless of weather conditions.

When it is not necessary to use the silo during the summer, it can be sealed up and the silage preserved for winter use. This prevents any waste in feed.

One point, however, must be kept in mind in planning the summer silo. This is the diameter of the silo in relation to the number of cows to be fed and the quantity to be fed to each cow. Silage enough must be fed daily to prevent excessive surface fermentation. As a general rule, a cow under summer conditions will consume about 20 pounds a day. On this basis the diameter of the silo in reference to the number of cows to be fed in summer will be as follows:

20 cows	8 feet in diameter
30 cows	10 feet in diameter
40 cows	12 feet in diameter

Inasmuch as 8 feet is about the minimum diameter of a silo in best practice, it will be seen that the summer silo for supplementing pasture has its best application in herds of 20 cows or more.

WINTER FEEDING.

The problems involved in winter feeding are usually distinctly different from those of summer feeding. Pasture (or green feed), usually the basis of summer feed-

ing, is not available. Broadly speaking, there are two factors involved in this problem, first, to satisfy the needs of the cow, and, second, to suit the pocketbook. The cow must have an ample supply of feed of a palatable nature, and this feed must be supplied at a price which will permit a profit on the feeding operation.

Viewed from an economic standpoint, there are some fundamental considerations which should first receive attention. In general farm practice it is advisable, so far as is economical, to use the feeds produced on the farm. Often the freight rates and the middleman's charges, if saved, will constitute a good profit for the feeder. This is especially true of roughage. Such feeds are bulky and in most cases must be baled at a considerable cost; the freight rates also are much greater in proportion to the nutrients contained than on the grains.

When land is high in price and the markets for dairy products are good, it is often impracticable to grow all the feeds on the farm. In such cases arrangements first should be made to grow the roughage, on account of the high cost of transporting these feeds. In most cases the prime object of the farm under such conditions will be to supply the greatest possible quantity of roughage.

It is a difficult problem to provide a system of winter feeding of roughage which will make the best use of home-grown roughage and at the same time insure full production. Only a general discussion of the problem can be attempted.

SILAGE.

In addition to containing the proper nutrients in the right proportion, part of the ration should be of a succulent nature. It is extremely difficult, if not impossible, to keep cows in full production throughout the winter without some succulent feed. There are two chief sources of succulent feed for winter feeding—silage and roots.

Of these, silage is in almost universal use by commercial dairymen. While almost any green crop may be used for silage, the heavy yields of corn, as compared with other crops, and its comparative ease of handling, together with its keeping qualities, make it the leading silage crop. Where the cost of land and the prices of dairy products are high, and the system of farming of necessity is intensive, it is questionable whether the dairyman should consider any other silage crop.

ROOTS.

The chief function of roots in cattle feeding is to supply a succulent feed. Under general farm conditions the quantity of nutrients grown per acre in root crops is small in comparison to the cost of production. These root crops, however, can be preserved during the winter equally well whether large or small quantities are fed each day, and therefore have special application when only a few cows are to be fed. Of the different root crops, mangel-wurzels furnish the greatest yield per acre. Other kinds of beets and turnips and carrots may be used. Turnips, however, should be fed after milking rather than before, as they cause a bad flavor in the products if fed immediately before milking. Carrots impart a desirable color to the milk.

DRY ROUGHAGE.

The best kinds of dry roughage to be fed to the dairy cow, in connection with corn silage or roots, are leguminous hays, such as alfalfa, red, crimson, or alsike clover and soy-bean or cowpea hay. While corn silage is an excellent feed, it is not a balanced one, as it does not contain sufficient protein and mineral matter to meet fully the requirements of the cow. The leguminous hays, in addition to being very palatable, have a tendency to correct this deficiency. They are also one of the best and

cheapest sources of protein. One or more of these hays can be grown on any farm, and in addition to their value for feeding purposes, they improve the soil in which they are grown. Hay from Canada field peas, sown with oats to prevent the peas from lodging, also makes an excellent roughage.

Corn stover, coarse hay, etc., also find a good market through the dairy cow. This class of roughage is low in protein, however, and when it is used the grain ration must be richer in protein.

No positive rule can be laid down as to the quantity of dry roughage that should be fed, but about 6 to 12 pounds a day for each cow, in addition to silage, will be found to be satisfactory in most cases. When the dry roughage is of poor quality, such as coarse, weedy hay or a poor grade of cornstalks, a large portion can often be given to advantage, allowing the cow to pick out the best and using the rejected part for bedding. With this quantity of dry roughage the cow will take, according to her size, from 25 to 50 pounds of silage. This may be considered as a guide for feeding to apply when the roughage is grown on the farm. When everything has to be purchased, it is often more economical to limit the quantity of roughage fed and increase the grain ration.

ROUGHAGE ALONE TOO BULKY A RATION. .

While a cow's stomach is large and her whole digestive system is especially designed to utilize coarse feeds, there is a limit to the bulk that she can take. This limit is below the quantity of roughage that it would require to furnish the nutrients she must have for maximum production; that is, a ration may contain the proper proportions of protein and carbohydrates and still be so bulky that she can not handle it. She, therefore, should have some grain, even though the roughage in itself is a balanced ration.



Herd of Dairy Cattle.

IMPORTANCE OF A BALANCED RATION.

. It is probably well at this point to refer briefly to the composition of feedstuffs as it relates to economical feeding of the dairy cow. The cow takes into her digestive system feeds which she utilizes for the production of body tissues, heating the body, performing bodily functions, such as digesting feed, moving from place to place, and for milk production. For the purposes of the present discussion, it is sufficient to say that the constituents or compounds and the relative quantities necessary for these operations have been determined; that is, we know that milk contains protein and energy or heat-producing constituents, the protein being represented by the casein and albumin and the energy and heat-producing constituents by the fat and sugar. In addition to the constituents or compounds necessary for the production of milk, she also must have the constituents necessary for performing the other functions mentioned. These for convenience, have been classified into proteins, carbohydrates, and fats. Fats perform much the same functions as carbohydrates and are worth for production practically two and one-fourth times as much per pound as carbohydrates, and in the balancing of a ration are usually classed with them. This brings us to a definition of a "balanced ration," which is a ration containing these various nutrients in the proportion the cow needs them.

The economical importance of a balanced ration is evident. The cow can use only certain elements or compounds in certain proportions; consequently, if the ration supplies an excessive amount of any one, the excess is liable to be waste. Not only is this true, but as the cow has to assimilate it, even though she can not use it, her capacity for production is reduced.

Cost.

In making a ration, cost is one of the important factors. The best practice is to compound a grain mixture so that it will balance with the home-grown roughage. With this in mind, the separate grains should be selected to supply the necessary nutrients at the lowest possible cost. For this, not only the price per hundred pounds, but also the relative cost of each constituent, especially protein, must be considered. For example, to determine the cost of a pound of digestible protein in a given feed divide the price of 100 pounds by the per cent of digestible protein in the feed. If this calculation is made for several feeds, the relative cost of protein in each will be apparent. Then the feeds that furnish protein at the least cost can be selected. The same can be done to determine the cost of the carbohydrates and fat, which are the heat-making or energy-producing part of the feed.

BULK.

A certain bulk is necessary in the grain mixture to obtain the best results. When heavy feeds are used, some bulky ones should be included to lighten the mixture, since it is probable that a certain degree of bulkiness aids digestion. Some of the common feeds are classified as to bulk in Table 4:

TABLE 4.—*Classification of common feeds as to bulkiness.*

Bulky.	Medium.	Heavy or compact.
Alfalfa meal. corn-and-cob meal. Bran (wheat). Dried brewers' grains. Dried distillers' grains. Oats, ground. Malt sprouts. Dried beet pulp.	Corn meal or feed. Hominy. Gluten feed. Rye. Barley. Buckwheat middlings.	Cottonseed meal. Linseed meal. Coconut meal. Peanut meal. Gluten meal. Wheat middlings.

PALATABILITY.

Palatability is of great importance in successful feeding. The best results can not be obtained with any feed which is not well relished by the cow; consequently any unpalatable feed to be used should be mixed with those that are appetizing.

PHYSIOLOGICAL EFFECT.

In making the grain mixture care should be exercised that too large a quantity of either constipating or laxative feed is not included. Cottonseed meal, for example, is decidedly constipating and should be fed with laxative grains or succulence, such as silage or roots. For ordinary feeding in most parts of the United States not more than one-third of the grain should be cottonseed meal. In some sections larger quantities have been fed, but this practice is not to be recommended. On the other hand, linseed-oil meal, because of its distinctly laxative action, should not be fed ordinarily in greater quantities than 11-2 pounds a day.



Dairy Herd In Everglades.

NUTRITIVE VALUE OF THE GRAINS AND CONCENTRATES.

As a general rule, the energy or heat-producing material is found chiefly in the stem and leaves of the plant and the protein is largely in the seeds. The great exception is in the case of legumes, which have larger percentages of protein throughout the plant and particularly in the leaves. It should be noted, therefore, that in supplying grain we are chiefly concerned with the protein it contains.

Two classes of feeds are used for making up the grain ration, namely, grains and by-products of the manufacturing industries. The grain produced on the farm and commonly used for cattle feeding are corn, oats, barley and rye. In many cases the demand for these grains for other purposes has become so great that the dairyman can not afford to use them; consequently, it has usually been found more economical to use the by-products of the manufacturing industries. The following are among the most common of these feeds: Wheat bran, wheat middlings, linseed meal, cottonseed meal, gluten meal, gluten feed, hominy feed, brewers' grains, malt sprouts, distillers' grains, beet pulp, molasses, buckwheat middlings, cocoanut meal, peanut meal.

The following analyses represent digestible nutrients in 100 pounds. The fat is multiplied by 2.25 and added to the carbohydrates. This represents the energy or heat-making part of the feed.

WHEAT BRAN.

Digestible nutrients.—Protein, 12.5 per cent; carbohydrates and fat, 48.4 per cent.

Bran is the outside coating of grains, and is the residue or by-product from the manufacture of flour. Wheat bran may be derived from winter or spring wheat, and there is little difference in its composition from either source.

From a physiological standpoint wheat bran is one of the very best feeds for cows. It is slightly laxative in nature, and generally tends to keep the cow's digestive system in good condition. The price based upon its protein content is usually so high that most commercial dairymen combine it with other feeds in which protein costs less per pound. Aside from the value of the nutrients which it contains, it has a special value in a feeding mixture, as it gives bulk and adds to the palatability. Wheat bran may be used when the rest of the grain ration is lacking in palatability or is of a constipating nature. It is especially good when the roughage is all dry. The best grades of wheat bran are of light weight, with large flakes. Some of the large mills put the sweepings from the mill into the bran; therefore, it is usually best to buy the highest grade of bran, provided the mills grading it are reliable. The output of small country mills is usually of excellent quality. Bran contains a high proportion of phosphorus and potash in its ash content.

WHEAT MIDDINGS.

Digestible nutrients.—Protein, 13.4 per cent; carbohydrates and fat, 55.9 per cent.

Standard wheat middlings or shorts are composed of the finer portions of the bran together with the coarser portion of the flour. They are not so flaky as bran, are a little less laxative, and contain a somewhat smaller quantity of ash. In other respects they may be said to resemble bran closely. This feed is somewhat pasty when moist, and consequently lacks bulk.

LINSEED MEAL.

Digestible Nutrients.—Old process: Protein, 30.2 per cent; carbohydrates and fat, 47.7 per cent. New process: Protein, 31.7 per cent; carbohydrates and fat, 44.2 per cent.

Linseed meal is a by-product of the manufacture of linseed oil from flaxseed, and is produced under two processes, known as the old and the new. Linseed meal or oil meal from a physiological standpoint is one of the very best feeds. It is laxative, palatable, and a very good "conditioner," but, like wheat bran, its price is usually excessive for its nutritive value. It has, however, a distinct place in a mixture in supplying protein to increase the palatability and improve the physiological effect. It is very heavy, so that it is well to feed it in connection with a bulky feed. It is especially applicable in a mixture to be fed with dry roughage.

COTTONSEED MEAL (CHOICE).

Digestible Nutrients.—Protein, 37 per cent; carbohydrates and fat, 41.2 per cent.

Cottonseed meal is the richest in protein of all the common cow feeds on the market. It is usually the cheapest source of protein available, but it does not have the best physiological effect upon the cow, often causing digestive troubles if fed in large quantities for long periods. At first it is advisable to start with 1 to 2 pounds a day, gradually increasing the quantity if no bad results are observed. In some herds in the North as high as 5 to 6 pounds a day are fed without bad results. In the South there seems to be no limit in this direction.

Cottonseed meal is a highly concentrated feed and should, if possible, be fed in a mixture with some bulky feed like bran. It can be fed to better advantage when the roughage contains an ample quantity of succulent feed. While its physiological effect in the North at least is not good as compared with most other cow feeds, its cheapness and the fact that in time the cows seem to overcome this tendency to digestive trouble from it are rapidly giving it great prominence as a cheap source of protein for dairy cows.

GLUTEN MEAL AND GLUTEN FEED.

Digestible Nutrients.—Gluten meal: Protein, 30.2 per cent; carbohydrates and fat, 53.8 per cent. Gluten feed: Protein, 21.6 per cent; carbohydrates and fat, 59.1 per cent.

Gluten meal is a by-product of the manufacture of starch from corn. The basis of the meal is the germ part of the corn kernel. Gluten feed is composed of the gluten meal plus a certain quantity of corn bran, which makes it lighter than the meal. Both feeds are fairly palatable and are usually among the cheapest sources of protein.

DRIED BREWERS' GRAINS.

Digestible Nutrients.—Protein, 21.5 per cent; carbohydrates and fat, 44.2 per cent.

Dried brewers' grains rank with wheat bran as a flaky, bulky feed. The physiological effect is nearly if not quite as good as bran. They differ in that they carry a somewhat larger percentage of protein than bran. Cows sometimes do not eat these grains readily at first, but soon overcome this aversion.

MALT SPROUTS.

Digestible Nutrients.—Protein, 20.3 per cent; carbohydrates and fat, 50.3 per cent.

Malt sprouts are loose and bulky and cows usually do not take them readily at first. The chief place of this feed is with other feeds in a mixture. Both brewers' grains and malt sprouts come from barley and are by-products from the manufacture of beer.

The proprietary feed companies control at the present time a large percentage of the output of dried grains and malt sprouts from the larger breweries, and these excellent feeds do not appear unmixed on the market to so great an extent as they did a few years ago.

HOMINY MEAL, FEED OR CHOP.

Digestible Nutrients.—Protein, 7 per cent; carbohydrates and fat, 77.6 per cent.

This by-product of the manufacture of hominy consists of part of the starchy portion of the corn and part of the germ. It is variously known, as the heading suggests, as hominy meal, feed, or chop. In many respects it resembles corn and is a good substitute for it. This feed is used chiefly to furnish the energy or heat-making part of the ration, but because of its low percentage of protein it is not an economical source of the latter.

DRIED DISTILLERS' GRAINS.

Digestible Nutrients.—Corn grains: Protein, 22.4 per cent; carbohydrates and fat, 66.5 per cent. Rye grains: Protein, 13.6 per cent; carbohydrates and fat, 52.8 per cent.

These grains are the by-product of the manufacture of alcohol and distilled liquors from corn and rye. Both kinds are rather bulky and usually the corn grains are among the cheapest sources of protein. These grains are not particularly palatable, consequently they should be used with other feeds in the grain ration.

DRIED BEET PULP.

Digestible Nutrients.—Protein, 4.6 per cent; carbohydrates and fat, 67 per cent.

Dried beet pulp is a by-product from the manufacture of sugar from the beet. As a source of protein it is not of high value, and the farmer should recognize this fact when he buys it. It is bulky, however, and has an excellent physiological effect upon the cow, as it aids in keeping her digestive organs in good condition. When for any reason neither silage nor roots are available, the pulp can be soaked for about 12 hours in about four times its weight of water; it then constitutes a good sub-

stitute for a succulent roughage. Beet pulp should be classed as a carbohydrates rather than as a protein feed.

MOLASSES.

Digestible Nutrients.—Protein, 1 per cent; carbohydrates and fat, 58.2 per cent.

Molasses, from both the beet and cane sugar factories, is valuable as a source of energy or heat-making material. The main difference between the two kinds being that the former is more laxative when fed in large quantities. When fed in small quantities, molasses adds materially to the palatability of the ration, but unless it is very low in price it is not usually an economical feed for dairy cows.

BUCKWHEAT MIDDINGS.

Digestible Nutrients.—Protein, 24.6 per cent; carbohydrates and fat, 52 per cent.

This floury feed is composed largely of that part of the buckwheat kernel under the hull together with some of the coarsest of the flour. It is rather heavy and tends to produce a tallowy butter if fed in large quantities. In certain sections it is one of the cheap sources of protein. Frequently bran and chaff are added to the middlings, thus greatly reducing their feeding value.

COCOANUT MEAL.

Digestible Nutrients.—Protein, 18.8 per cent; carbohydrates and fat, 60.2 per cent.

This meal is the ground cake resulting from the manufacture of cocoanut oil. It is a rather heavy feed which, on account of its high oil content, tends to become rancid if kept for long periods in the summer. If it is possible to obtain cocoanut meal at a reasonable price it will be found to be a valuable addition to the ration.



Herd of Jersey Dairy Cattle.

PEANUT MEAL.

Digestible Nutrients.—Hulled nuts: Protein, 42.8 per cent; carbohydrates and fat, 36.6 per cent. With hulls: Protein, 20.2 per cent; carbohydrates and fat, 36.5 per cent.

This meal is the by-product of the manufacture of peanut oil and varies greatly in composition, depending upon the percentage of hulls it contains. It is an excellent dairy feed and in some sections is a cheap source of protein.

FARM GRAINS.

Some of the more common grains that are grown upon the farm will be described briefly below.

CORN.

Digestible nutrients.—Corn meal: Protein, 6.9 per cent; carbohydrates and fat, 76.9 per cent. Corn-and-cob: Protein, 6.1 per cent; carbohydrates and fat, 72 per cent.

Corn is probably the most common grain grown upon the farm and is well adapted to be part of the ration of a dairy cow. Corn is palatable, heavy, and one of the best and cheapest sources of the energy or heat-making part of the ration, but, on account of its low protein content, it should not form the entire grain ration. In order to lighten up this grain, the cob is often ground with the kernel, the resulting meal being called corn-and-cob meal. This feed is more bulky and better adapted for mixing with heavy grains.

OATS (GROUND).

Digestible nutrients.—Protein, 9.4 per cent; carbohydrates and fat, 60.6 per cent.

This very palatable cereal is slightly laxative and very well adapted for feeding dairy cattle. Owing to the high market price of oats, it is usually more economical to sell them and purchase other feeds which furnish nutrients at a cheaper price.

BARLEY (GROUND).

Digestible nutrients.—Protein, 9 per cent; carbohydrates and fat, 70.4 per cent.

This is a palatable feed and one that can be used to good advantage as a source of carbohydrates or energy material for dairy cows where its price is moderate. Like corn, it should not be the only grain in the ration.

RYE (GROUND)

Digestible nutrients.—Protein, 9.2 per cent; carbohydrates and fat, 70.5 per cent.

This grain is not especially palatable and should not be used in large quantities, as it tends to produce a hard, tallowy butter. Mixed with other feeds, it is often a valuable addition to the ration.

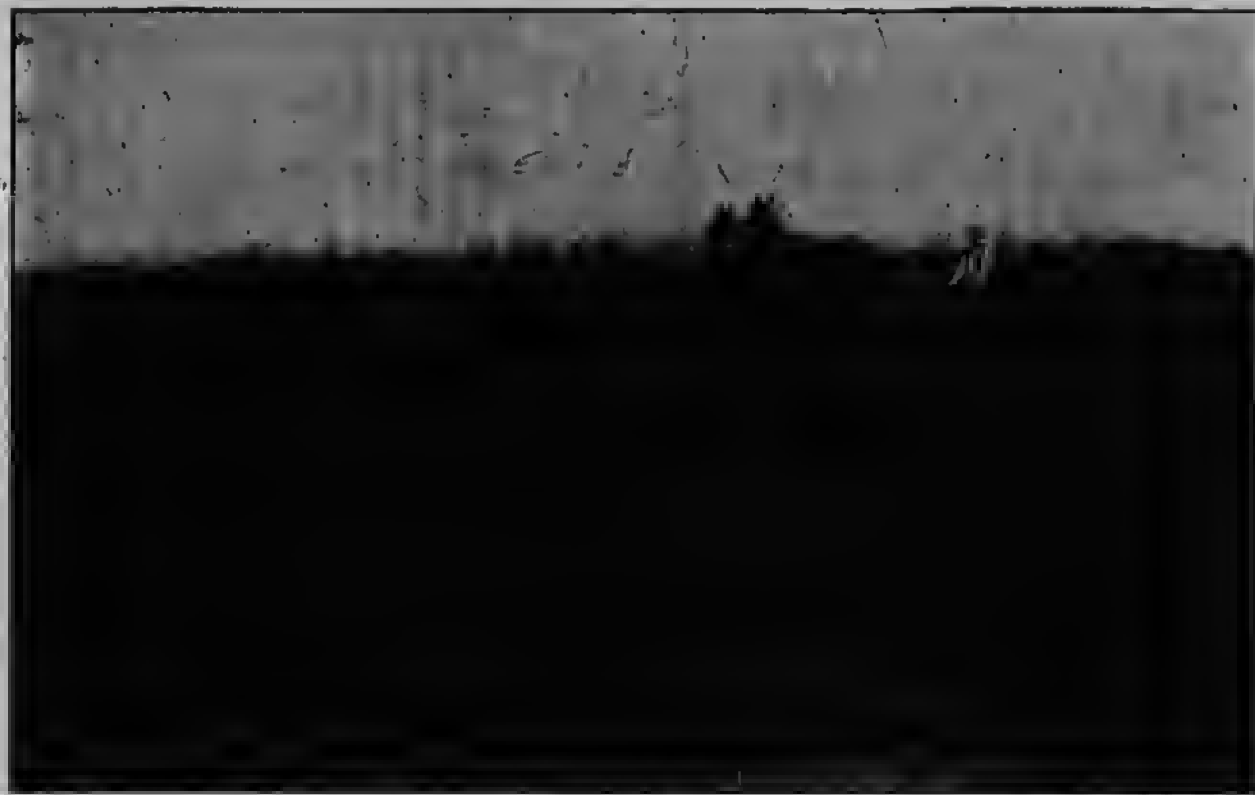
ROUGHAGE.

All roughage may be divided for convenience into two general classes with reference to its content of protein. In the first, or low-protein, class are placed corn silage, corn stover, timothy hay, millet hay, prairie hay, hays from the common grasses, straws of the various cereals, and cottonseed hulls. The second, or high-protein, class includes the various legume hays, such as alfalfa, the clovers, cowpea, soy bean, and oat and pea. Economy in feeding demands that grain should supplement the roughage, consequently the grain mixtures will be compounded to fit the class to which the roughage belongs.

COMPOUNDING A GRAIN MIXTURE.

A few simple rules for making up a grain mixture are given briefly below:

1. Make up the mixture to fit the roughage available. With roughage entirely of the low-protein class the grain should contain approximately from 18 to 22 per cent of protein, while with exclusively high-protein roughage the grain ration need contain only about 13 to 16 per cent.



Cow Peas and Sorghum.

2. Select grains that will furnish the various constituents, especially protein, at the least cost, using home-grown grains if possible.

3. Be sure that the mixture is light and bulky.

4. The mixture should be palatable.

5. See that the grain has the proper physiological effect upon the cow.

All these suggestions should be kept in mind in order to obtain the best possible combination of grains. For the convenience of the feeder Table 5, showing the digestible protein content of the more common grains and by-products feeds, is given. The per cent columns are arranged in 5 per cent divisions.

Table 5.—*Approximate digestible protein of various grains and by-products.*

Average 5 per cent (2.5 to 7.4 per cent).	Average 10 per cent (7.5 to 12.4 per cent).	Average 15 per cent (12.5 to 17.4 per cent).	Average 20 per cent (17.5 to 22.4 per cent).
Corn meal. Corn-and-cob meal. Hominy feed. Dried beet pulp.	Wheat, ground. Oats, ground. Barley, ground. Buckwheat, ground. Sorghum grains, ground.	Wheat bran. Wheat mid- dlings. Dried distillers' grains (rye).	Gluten feed. Malt sprouts. Dried brewers' grains. Dried distillers' grains (corn). Cocoanut meal. Peanut meal with hulls. Cowpeas.
Average 25 per cent (22.5 to 27.4 per cent).	Average 30 per cent. (27.5 to 32.4 per cent).	Average 35 per cent (32.5 to 37.4 per cent).	Average 40 per cent. (37.5 to 42.4 per cent).
Buckwheat middlings.	Gluten meal. Linseed meal (both pro- cesses). Soy beans.	Cottonseed meal.	Peanut meal (hulled nuts).

The per cent of protein in a grain mixture may be found as follows: Take any number of parts of any num-

ber of feeds in the table, and for each part put down the per cent of the column in which it is found. Add these numbers and divide the sum by the number of parts. Examples:

1 part wheat bran.....	15
1 part cottonseed meal.....	35
1 part gluten feed.....	20
<hr/>	
3	3) 70

23.3 per cent protein.

3 parts wheat bran (3x15).....	45
2 parts cottonseed meal (2x35)..	70
1 part gluten feed (1x20).....	20
<hr/>	
6	6) 135

22.5 per cent protein.

The approximate price of a ration per pound of protein may be ascertained as follows: Divide the total price of the mixture by the average protein content as derived above. The mixture costing the smallest price per pound of protein, other things being equal, is the most economical. Unfortunately, other things are never exactly equal, for the physiological effect of the grain, bulk, and palatability must also be taken into consideration. Practically all the grain feeds low in protein are rich in carbohydrates, but, as already stated, grains are purchased primarily for their protein content, as almost invariably the carbohydrates can be produced more cheaply in the form of corn silage, cornstalks, etc. While the above-mentioned method of testing the economy of a grain ration is not entirely accurate, it is usually a safe method to follow.

SAMPLES OF GRAIN MIXTURES TO BE FED WITH VARIOUS ROUGHAGES.

WITH LOW-PROTEIN ROUGHAGES.

The following grain mixtures are adapted to be fed with roughages of the low-protein class, such as corn silage, corn stover, timothy, prairie, rowen. or millet hays, cottonseed hulls, etc.:

Mixture 1.—Per cent of digestible protein, 18.4:

- 500 pounds corn meal.
- 400 pounds dried distillers' grains (corn).
- 200 pounds gluten feed.
- 300 pounds linseed meal (old process).

Mixture 2.—Per cent of digestible protein, 19.8:

- 100 pounds corn meal.
- 100 pounds cottonseed meal.
- 100 pounds linseed meal (old process).
- 200 pounds wheat bran.

Mixture 3.—Per cent of digestible protein, 19.8:

- 300 pounds corn meal.
- 200 pounds cottonseed meal.
- 100 pounds dried distillers' grains (corn).
- 100 pounds gluten feed.

Mixture 4.—Per cent of digestible protein, 19.8:

- 200 pounds corn-and-cob meal.
- 100 pounds cottonseed meal.
- 100 pounds linseed meal (old process).

Mixture 5.—Per cent of digestible protein, 18.8:

- 200 pounds corn meal.
- 150 pounds cottonseed meal.
- 100 pounds gluten feed.
- 100 pounds wheat bran.

Mixture 6.—Per cent of digestible protein, 18.1:

- 200 pounds corn meal.
- 100 pounds cottonseed meal.

- 100 pounds oats, ground.
- 100 pounds linseed meal (old process).
- Mixture 7.—Per cent of digestible protein, 19.4:
 - 400 pounds corn meal.
 - 200 pounds cottonseed meal.
 - 300 pounds gluten feed.
 - 400 pounds dried brewers' grains.
- Mixture 8.—Per cent of digestible protein, 18.3:
 - 200 pounds corn meal.
 - 100 pounds linseed meal (old process).
 - 150 pounds gluten feed.
 - 200 pounds dried brewers' grains.
- Mixture 9.—Per cent of digestible protein, 18.4:
 - 300 pounds corn-and-cob meal.
 - 200 pounds cottonseed meal.
- Mixture 10.—Per cent of digestible protein, 19.1:
 - 200 pounds corn-and-cob meal.
 - 100 pounds cottonseed meal.
 - 100 pounds gluten feed.
 - 100 pounds buckwheat middlings.
- Mixture 11.—Per cent of digestible protein, 19.1:
 - 200 pounds barley.
 - 200 pounds cottonseed meal.
 - 100 pounds alfalfa meal.
 - 100 pounds wheat bran.

WITH HIGH-PROTEIN ROUGHAGES.

With roughage of the high-protein class, such as clover, alfalfa, soy beans, cowpeas, and vetch or other legume hay, the following grain mixtures may be used:

- Mixture 12.—Per cent of digestible protein, 14.1:
 - 400 pound corn meal.
 - 100 pounds cottonseed meal.
 - 100 pounds gluten feed.
 - 100 pounds wheat bran.

Mixture 13.—Per cent of digestible protein, 15.6:

- 400 pounds corn meal.
- 200 pounds gluten feed.
- 200 pounds linseed meal (old process).
- 100 pounds oats, ground.

Mixture 14.—Per cent of digestible protein, 14.9:

- 200 pounds corn meal.
- 200 pounds gluten feed.
- 100 pounds malt sprouts.
- 100 pounds wheat bran.

Mixture 15.—Per cent of digestible protein, 16.7:

- 300 pounds barley.
- 100 pounds cottonseed meal.
- 100 pounds alfalfa meal.
- 100 pounds wheat bran.

Mixture 16.—Per cent of digestible protein, 13.7:

- 100 pounds barley.
- 200 pounds cocoanut meal.
- 100 pounds oats, ground.
- 100 pounds wheat bran.

Mixture 17.—Per cent of digestible protein, 15.8:

- 300 pounds corn-and-cob meal.
- 200 pounds gluten feed.
- 100 pounds cottonseed meal.
- 100 pounds wheat bran.

Mixture 18.—Per cent of digestible protein, 15.5:

- 100 pounds corn meal.
- 100 pounds linseed meal (old process)
- 100 pounds oats, ground.

WITH COMBINATION OF LOW AND HIGH PROTEIN ROUGHAGES.

The following grain mixtures are adapted for feeding with a combination of the low and high protein classes of roughage, such as silage and clover, or other legume hay:

corn stover and clover, or other legume hay; mixed hay, or oat-and-pea hay, etc.:

Mixture 19.—Per cent of digestible protein, 16.3:

- 400 pounds corn meal.
- 300 pounds dried distillers' grains (corn).
- 100 pounds gluten feed.
- 100 pounds linseed meal (old process).

Mixture 20.—Per cent of digestible protein, 16.1:

- 300 pounds corn meal.
- 100 pounds cottonseed meal.
- 100 pounds linseed meal (old process).
- 200 pounds wheat bran.

Mixture 21.—Per cent of digestible protein, 16.4:

- 400 pounds corn meal.
- 100 pounds cottonseed meal.
- 200 pounds dried distillers' grains (corn).
- 100 pounds gluten feed.

Mixture 22.—Per cent of digestible protein, 16.7:

- 400 pounds corn meal.
- 100 pounds cottonseed meal.
- 200 pounds gluten feed.
- 200 pounds dried brewers' grains.

Mixture 23.—Per cent of digestible protein, 16.4:

- 200 pounds corn-and-cob meal.
- 100 pounds cottonseed meal.

Mixture 24.—Per cent of digestible protein, 16.7:

- 200 pounds corn meal.
- 100 pounds peanut meal (with hulls).
- 100 pounds cottonseed meal.
- 100 pounds wheat bran.

Mixture 25.—Per cent of digestible protein, 16.4:

- 100 pounds corn meal.
- 100 pounds oats, ground.
- 100 pounds cottonseed meal.
- 100 pounds wheat bran.

The above-named mixtures which contain linseed meal

are particularly adapted for use when no succulence is in the ration.

*Rations Suitable for Florida Where Cottonseed Meal Is
of Moderate Price and Cowpea and Other Hays
Are Raised on the Farm.*

	Pounds.
(1) Corn silage	35
Cowpea hay	8
Cottonseed meal or oil meal	7
(2) Corn Silage	30
Cottonseed hulls	12
Cottonseed meal	7

BALANCED RATIONS FOR DAIRY COWS.

By JOHN M. SCOTT.

In the lists of rations given below, home-grown feeds are separate from purchased feeds. The amount given in each ration is sufficient for one day's feed for a cow weighing 1,000 pounds and giving about three gallons of milk per day. (Dairy cows in Florida usually weigh from 600 to 800 pounds.) For cows giving a heavier flow of milk, it will be necessary to increase the amounts of feed accordingly. No attempt has been made to estimate the cost of these rations, or to say which will be the cheapest, as the prices of feeds vary in different places. The amounts of each feed being given, it will be an easy matter for the dairyman to calculate the local cost of the different rations and in this way find out which will be the cheapest for him to use.

RATIONS OF HOME-GROWN FEEDS.

(1)	Velvet beans in the pod.....	10 pounds
	Japanese cane, cured in shock.....	10 pounds
	Cowpea hay	8 pounds
(2)	Velvet beans in the pod.....	10 pounds
	Cottonseed meal	2 pounds
	Japanese cane	12 pounds
(3)	Velvet beans in the pod.....	8 pounds
	Cowpea hay	10 pounds
	Japanese cane	10 pounds
(4)	Corn	3 pounds
	Velvet beans in the pod	7 pounds
	Cowpea hay	9 pounds
	Japanese cane silage	20 pounds
(5)	Velvet beans in the pod	8 pounds
	Cowpea hay	10 pounds
	Sorghum, green	20 pounds
(6)	Velvet beans in the pod	8 pounds
	Cowpea hay	8 pounds
	Crabgrass hay	8 pounds
	Sweet potatoes (or cassava)	25 pounds

The above are well-known home-grown feeds, or feeds that can be grown at home. Feeds can be grown more cheaply than they can be bought on the market. In these rations, cowpea hay can be replaced by an equal weight of beggarweed hay, velvet bean hay, or any other good legume hay. Which of these hays should be used will depend largely on the cost of the hay on the market, or rather on what it will cost to produce it. One may be so situated as to be able to grow beggarweed hay, or velvet

bean hay, to better advantage than cowpea hay. All of the hays in these rations are considered to be of good quality, cut at the proper stage of maturity, and properly cured.

RATIONS OF PURCHASED FEEDS.

(1)	Alfalfa hay	10	pounds
	Wheat bran	4½	pounds
	Shorts	4½	pounds
(2)	Alfalfa hay	10	pounds
	Wheat bran	9	pounds
	Crabgrass hay	13	pounds
(3)	Alfalfa hay	10	pounds
	Shorts	9	pounds
	Crabgrass hay	13	pounds
(4)	Alfalfa hay	10	pounds
	Wheat bran	6	pounds
	Beet pulp	10	pounds
(5)	Wheat bran	9	pounds
	Cottonseed meal	3	pounds
	Cottonseed hulls	20	pounds
(6)	Shorts	8	pounds
	Cottonseed meal	2½	pounds
	Hay (any non-legume)	15	pounds
(7)	Wheat bran	6	pounds
	Cottonseed meal	2½	pounds
	Beet pulp	10	pounds
	Timothy hay	7	pounds
(8)	Wheat bran	9	pounds
	Cottonseed meal	3	pounds
	Japanese cane	15	pounds

(9) Corn	5 pounds
Cottonseed meal	2½ pounds
Cowpea hay	12 pounds
Silage	30 pounds

It should be understood that the above rations are not necessarily to be fed in the exact quantities given above, but should be modified to suit local conditions or the actual conditions on each farm. They are given to show approximately the average amounts and character of feed that would be consumed daily by a 1,000-pound steer during the feeding period.

It is well to feed as near a balanced ration as possible without materially increasing its cost. Sometimes the prices of available feeds are such that a farmer is justified in deviating from the standard. Such conditions are illustrated by the use of some of the rations given above. The second ration shown for the South is an example, as that ration is very narrow, but in certain localities it is more profitable than one which is balanced by the use of high-priced carbohydrate feeds.

SUPPLEMENTARY FEEDS.

While silage is an excellent feed, it is not a complete one for dairy stock. It is too bulky and watery and contains insufficient protein and mineral matter to fully meet the requirements of the dairy cow. It should be combined with some leguminous hay, such as clover, cowpeas, or alfalfa. These will tend to correct the deficiencies of the silage in dry matter, protein, and mineral constituents. A ration of silage and, say, alfalfa hay alone is satisfactory, however, only for cows which are dry or giving only a small amount of milk and for heifers and hinds. Cows in full milk require some more concentrated feed than hay or silage, else they can not consume enough feed to

meet the demands of the body. The result will be that the cows lose in flesh and in milk flow.

AMOUNT TO FEED.

The amount of silage to feed a cow will depend upon the capacity of the animal to take feed. She should be fed as much as she will clean up without waste when consumed along with her hay and grain. Raise or lower the amount until the proper quantity is ascertained. Generally speaking, a good cow should be fed just short of the limit of her appetite. If she refuses any of her feed it should be reduced at once. The small breeds will take 25 or 30 pounds per day; the large breeds about 40; and the medium-sized ones amounts varying between.

RATIONS.

Ironclad directions for feeding cows can not be given. In general, however, they should be supplied with all the roughage they will clean up with grain in proportion to butterfat produced. The hay will ordinarily range between 5 and 12 pounds per cow per day when fed in connection with silage. For Holsteins 1 pound of concentrates for each 4 pounds of milk produced will prove about right. For Jerseys 1 pound for each 3 pounds of milk or less will come nearer meeting the requirements. The grain for other breeds will vary between these two according to the quality of milk produced. A good rule is to feed seven times as much grain as there is butterfat produced.

The following rations will be found good:

For a 1,300-pound cow yielding 40 pounds of milk testing 3.5 per cent:

	Pounds.
Silage	40
Clover, Cowpea, or Alfalfa Hay	10
Grain mixture	10

For the same cow yielding 20 pounds of 3.5 per cent milk:

Silage	40
Clover, Cowpea, or Alfalfa Hay	5
Grain mixture	5

For a 900-pound cow yielding 30 pounds of 5 per cent milk:

Silage	30
Clover, Cowpea, or Alfalfa Hay	10
Grain mixture	11

For the same cow yielding 15 pounds of 5 per cent milk:

Silage	30
Clover, Cowpea, or Alfalfa Hay	8
Grain mixture	5

A good grain mixture to be used in a ration which includes silage and some sort of leguminous hay is composed of:

	Parts.
Corn Chop	4
Wheat Bran	2
Linseed-oil Meal or Cottonseed Meal	1

In case the hay used is not of this kind some of the corn chop may be replaced by linseed or cottonseed meal. In many instances dried brewers' grains or crushed oats may be profitably substituted for the bran.

TIME TO FEED.

The time to feed silage is directly after milking or at least several hours before milking. If fed immediately before milking the silage odors may pass through the

cow's body into the milk. Besides, the milk may receive some taints directly from the stable air. On the other hand, if feeding is done subsequent to milking the volatile silage odors will have been thrown off before the next milking hour. Silage is usually fed twice a day.

Many objections have been made to the feeding of silage; some condenseries even refusing to let their patrons use it. These objections are becoming less common, since milk from cows fed silage in a proper manner is in no way impaired; besides which there is nothing about silage that will injure in any way the health of the animals.

SILAGE FOR CALVES, BULLS, AND DRY COWS.

Calves may be fed silage with safety when they are about 3 or 4 months old. It is perhaps of greater importance that the silage be free from mould or decay when given to calves than when given to mature stock. After the calves are weaned they may be given all the silage they will eat up clean. Yearling calves will consume about one-half as much as mature stock, that is, from 15 to 20 pounds a day. When supplemented with some good leguminous hay little, if any grain will be required to keep the calves in a thrifty, growing condition.

There is a decided opinion among some breeders of dairy stock that a large allowance of silage is detrimental to the breeding qualities of the bull. Whether there is any scientific foundation for this opinion remains to be determined. Pending further investigations, however, it is advisable to limit the allowance to about 15 pounds of silage a day for each 1,000 pounds of live weight. When fed in this amount silage is thought to be a good, cheap, and safe feed for bulls. It should of course be supplemented with hay, and with a small allowance of grain also in the case of bulls doing active service or growing rapidly.

Cows when dry will consume almost as much roughage

as when milking. Silage may well form the principal ingredient of the ration, in fact, with 25 to 40 pounds of silage and a small supplementary feed of clover, cowpea, or alfalfa hay, say 5 or 6 pounds a day, the cows will keep in good flesh and even make some gain. Cows in thin flesh should receive in addition a small amount of grain. Silage will tend to keep the whole system in a state of healthy activity and in this way lessen the troubles incident to parturition.

SILAGE FOR SUMMER FEEDING

One of the most trying seasons of the year for the dairy cow is the latter part of the summer and early fall. At this season the pastures are often short or dried up, and in such cases it is a common mistake of dairymen to let their cows drop off in flow of milk through lack of feed. Later they find it impossible to restore the milk flow no matter how the cows are fed. Good dairy practice demands that the milk flow be maintained at a high point all the time from parturition to drying off. It becomes necessary, therefore, to supply some feed to take the place of the grass. The easiest way to do this is by means of silage. Silage is cheaper and decidedly more convenient to use than soiling crops.

The amounts to feed will depend upon the condition of the pastures, varying all the way from 10 pounds to a full winter feed of 40 pounds. It should be remembered in this connection that silage contains a low percentage of protein, so that the greater the amount of silage fed the greater must be the amount of protein in the supplementary feeds to properly balance the ration.

INDIVIDUAL FEEDING.

Different cows have different capacities for converting feed into milk. For this reason the above-mentioned rules

can serve only as indicators for the inexperienced feeders. No man who has not a full appreciation of the wide variation in individual cows will be fully successful as a feeder. Some cows may have natural capacity for producing large quantities of milk, and may not receive feed enough for maximum production. By increasing the feed of the highest-producing cows and carefully consulting the milk sheets on which each cow's daily production is recorded, the skillful feeder will soon find that some cows in the herd will respond to the increased allowance and return a good profit on the additional feed given. On the other hand, there are cows that have a limited capacity for milk production and are very liable to be overfed. By carefully studying each individual cow the feeder will soon ascertain the point beyond which any addition to the grain ration becomes unprofitable.

WATER FOR COWS.

All animals require plenty of good, pure water. This is especially true of the milking cow, as water constitutes more than three-fourths of the total volume of milk. The water supply, therefore, demands the dairyman's most careful attention. Stale or impure water is distasteful to the cow and she will not drink enough for maximum milk production. Such water may also carry disease germs which might make the milk unsafe for human consumption or be dangerous to the cow herself. During the winter, when cows are stabled the greater part of the time, they should be watered two or three times a day unless arrangements have been made to keep water before them at all times. The water should, if possible, be 15° or 20° above the freezing point, and should be supplied at practically the same temperature every day. When water well above freezing temperature is stored in tanks and piped directly to the cow, there is probably little occasion for facilities to warm it. When

it stands in a tank on which ice often forms, it usually pays well to warm it slightly. This can be done by a tank heater, by live steam, or by hot water from a boiler. If a boiler is used for running a separator or for heating water to wash and sterilize utensils, steam from it can readily and cheaply be used to warm the water.

SALT.

Salt is required by all animals. The dairy cow requires an ounce or more a day, and while she should be given all she needs, she should not be forced to take more than she wants. It is best, therefore, to give only a small quantity on the feed, and to place rock salt in boxes in the yard where she can lick it at will.

SOIL EROSION, AN IMPORTANT MATTER

In this connection we wish to bring to the farmer's attention a condition that is growing serious in the more rolling lands of the State, and is wasting at a high rate the fertility of these lands. We mean soil erosion.

Soil washing by heavy rains is a cause of the loss of soil fertility on rolling upland farms. The amount of this loss is difficult to determine accurately. But it is reasonably certain that as much as four to five per cent. of the real fertile soil may be lost during one year on even a gently sloping field if the surface is left bare of vegetation. This means that the continuous cultivation for a long period of time may result in the loss of practically all the fertile soil on even gently rolling land, unless some methods are adopted to prevent it. On hill lands the loss is necessarily much more rapid.

The element lost in this way is one of the most valuable that exists—nitrogen. This element in the soil is contained in the organic or vegetable matter. Nitrogen is made available for the use of plants by the decay of

organic matter. It is considered that about two per cent. of the total amount present becomes available each year. It is this two per cent. which may be removed by the crops, by leaching, and in the form of gas, by evaporation. As the availability of the other elements of plant food in the soil is closely associated with the decay of organic matter, it is certain that the washing away of that part of the soil richest in organic matter results in a lack of all the really valuable plant food. In addition to the loss of plant food, the poorer physical condition of the soil resulting from the removal of organic matter and the inconvenience caused by the necessity for ditches in the fields are to be considered.

The sort of farm work that causes excessive erosion is continuous cultivation without crop rotation, shallow plowing, running furrows down the hills, leaving the land bare of vegetation in winter, neglect of control of the gullies, and the exhaustion of organic matter.

The best way to control erosion is by systematic rotation of crops, containing fewer cultivated crops and more hay and pasture crops, by the gradual deepening of the soil, by occasional deep plowing, the use of barn yard and green manures, winter cover crops such as rye, oats and wheat, and prompt control of gullies and ditches.

Cultivate the level lands and plant the hillsides to pasture grasses for permanent pastures, and thus reclaim the worn-out hill lands.

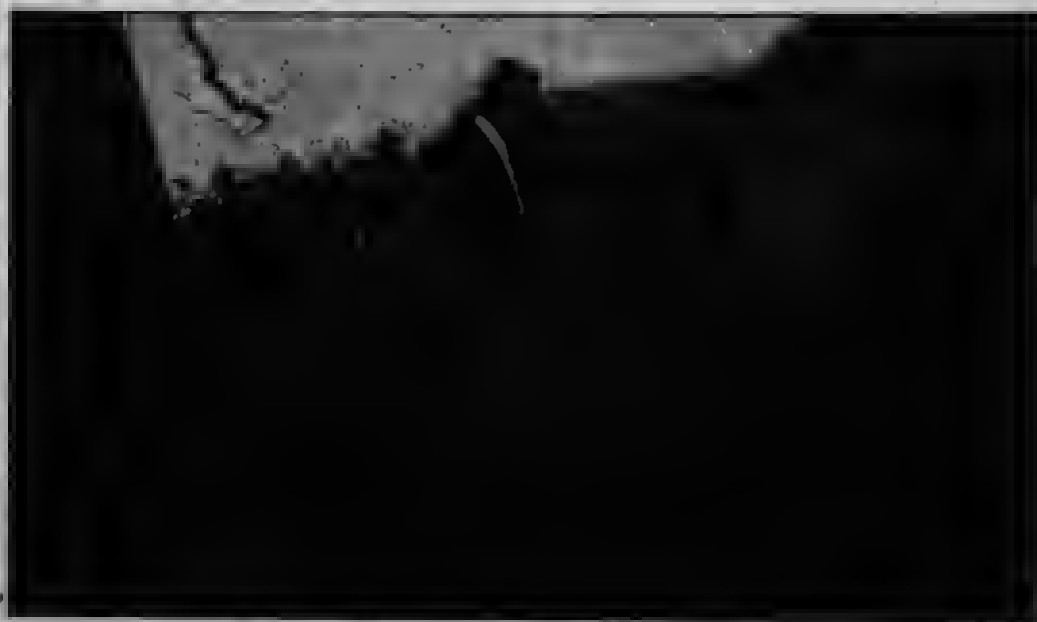
As lands increase in value, reclamation becomes profitable. Steep, badly washed hillsides may be also set to forest trees. Small ditches may be filled with litter and soil and seeded down to grass. Large ditches may be filled by obstructing with brush and coarse litter staked and weighted down, by planting willows, or placing some form of obstruction in the gullies, which will in time aid in filling them and gradually restore these soils to useful fields. Our people must realize that neglect in this

matter means positive ruin to the land itself. They must also realize that the soil is the one most valuable natural resources of any country. From this source, directly or indirectly, we derive all that we have, use or subsist upon. In fact, the soil may justly be considered the bedrock of civilization itself. Thus considered it becomes as necessary to existence as the air we breathe or the water we drink. Then the case of the soil and the prevention of its destruction is one of the most important features connected with farm management. It is a vital subject to continued prosperity and the maintenance of farm land values. No owner of lands can afford to ignore its importance.

WHEAT IN FLORIDA.

By H. S. ELLIOT, Chief Clerk Department of Agriculture.

That wheat can be successfully grown in Florida, there is no doubt. The early settlers in Florida grew their own wheat and made their own flour. True, the mills used in those days were of vastly different type from the present, but the quality of the flour was equally as nutritious and wholesome, if not more so, than the new process flours of today. We consider that the growing of wheat in Florida, owing to the condition of the times and the demand for breadstuffs by the allied powers, is practically a necessity, and that Florida in common with other States should live within herself as nearly as possible. In fact, it is a patriotic duty, which the people of our State owe to our country and the cause we are engaged in defending, to grow every kind of food products that are necessary not only to maintain the people at home, but to supply our quota of foodstuffs to the armies in the field. Wheat can be grown in Florida from the north central portion of the State, northeast and west to the Perdido River. Most of the land in the region named will produce one or more of the varieties of wheat adapted



The Biggest Hog Ever Raised in Florida. Weight, 1,326 Pounds

to southern conditions. Wheat is the world's choicest bread crop and the source of one of the principal foods of the most progressive and intelligent peoples and nations of the world. The only other crop that approaches it in food value, and that is grown to any extent, is rice. With these conditions before us we feel justified in suggesting that all farmers who can, and whose lands are adapted, in whole or in part, to wheat growing, plant at least enough for home consumption. A few acres planted by each farmer will give him all of the flour that he needs throughout the year. If each farmer in Florida, of the ordinary size farm, should plant from three to five acres to wheat, he would find it the most profitable crop that he could plant. In doing this, if he does no more, it would set free many hundred thousands of bushels of wheat for war consumption. We suggest the following varieties as being adapted to Florida soils: Blue Stem, Red May, Georgia Red and Leap's Prolific. Of these, the Blue Stem, a smooth-headed wheat, is well adapted to the better quality of sandy loam soils of Florida; likewise, the Red May wheat. The Georgia Red and Leap's Prolific do best on the clay loam soils. Any of the varieties mentioned will do well on the better gradations of the soils mentioned above.

SOILS.—Light fertile clay and medium fertile sandy loams of good depth, and well drained, are the best lands for wheat culture. Heavy clays are too close in texture and liable to bake under certain conditions. But light clay loam and good sandy loams have about the proper consistency or degree of compactness necessary to retain moisture, and are better adapted to wheat cultivation than the heavier clays or lighter loams. Good drainage is necessary to the proper development of the wheat plant, and a medium porous, permeable sub-soil is also important during most of the growing period of wheat. A great deal depends on the soil as regards the yield as well as the quality of the grain. Deep plowing is not

necessary to the successful growing of wheat. In breaking land that has not been in cultivation the year previous, six to ten inches, depending upon conditions of the soil, will be about correct. If it is stubble land that is to be planted in wheat, it need not be broken with a turn plow. If in the first instance the land is well broken, then harrowed cross-wise with a disk, and later with a straight-toothed smoothing harrow, a good seed bed will be obtained. If it is stubble land, such as corn land, cow-peas or velvet beans, where the crop has been cut off for hay, the soil will need no turning, but the planting can be equally as well done by preparing the land with a heavy disk; then if the wheat is to be sown broadcast it can be sown on the disked soil and harrowed in with a straight-toothed harrow. The best way of planting wheat, however, is with a drill, which opens the furrows, drops the seed, covers and rolls it with one operation. In preparing the land, however, the surface should be left clean without sticks or weeds left lying on the ground, which would interfere with the handling of the harvest machinery. In the case of fallow lands, it should be well broken early in the fall, or in Florida in the late summer, from three weeks to a month, at least, before the wheat is to be planted. One thing to remember is that it will be a waste of both time and seed to neglect a proper preparation of the soil. A good seed bed is half the battle.

The time for sowing wheat in Florida of course depends upon the section of the State where it is to be grown. In Northern and Western Florida the best time would be from about the middle of October to the middle of November. In Southern Florida the best time would be about the first of November to December. There can be no fixing of positive dates in this matter, and the grower will have to use his discretion as to the time best suited for planting.

FERTILIZING. — The best form of manuring for

wheat, and in general the best kind of manure adapted to wheat growing, is farm lot or stable manure, but if this kind of manure is applied it should be under the crop preceding the sowing of the wheat. If commercial fertilizers are to be relied on, then it is best to apply that broadcast, and later, if there is barn yard manure to spare, that can be applied as to a top dressing. Manures containing too much nitrogen should not be used. A good formula for this purpose is, and one that is generally recommended by most growers, on the character of soils we have in Florida, a mixture analyzing about three and one-half per cent nitrogen, ten to twelve per cent of available phosphoric acid, and about four per cent potash, to be followed in the spring, when the wheat indicates a swelling of the upper portion of the plants prior to heading, with nitrate of soda. This will be about four weeks before the plant heads. The application of about 100 to 150 pounds of nitrate of soda per acre will add greatly to the yield of grain. If the land has been well cultivated and kept in a reasonably fertile condition, especially manures, like stable manure, that contain a considerable amount of humus, then the following formula would be an excellent one in producing a good yield: Acid phosphate, 350 pounds sulphate of ammonia, 130 pounds; muriate of potash, 90 pounds; mixed and used on one acre. This also should be followed in the spring as above suggested with about 100 pounds of nitrate of soda broadcast. This is rather on the intensive system of manuring, but it will pay well. Some soils under certain conditions will be much benefited by the application of well slacked lime. From 25 to 40 bushels per acre on poor land, and especially the thin clay land, will have a good effect. Its benefit consists in loosening up the clay lands, making them more friable, of easier cultivation, and sets free the potash in the clay for the use of the plants.

These brief descriptions and instructions are intended more for those who have not planted wheat on their



50 Hogs Slaughtered at One Time on State Farm at Ralford, December 6, 1918. Average Net Weight, 202 Pounds Each.

farms. The average, older and expert farmer will easily understand the best methods of growing grain crops. There is much similarity in the methods used in growing wheat, oats and rye. The same fundamental principles underlie the characteristics of each of these crops and the methods of their cultivation. In closing this, the Department of Agriculture urges the people whose lands are adapted to wheat raising in Florida to plant the acreage that they can handle best.

GROWING RYE IN FLORIDA.

By H. S. ELLIOT, Chief Clerk Department of Agriculture.

Soils Best Adapted to Rye:

Rye is one of the most important cover crops grown in the State, although planted in a small way. Its real value as a grazing crop, as well as a cover crop, does not seem to have been appreciated as it deserves. Rye can be grown on almost all of the well-drained soils of the State, especially those in the North-Central, Northeastern and Middle and Western sections of Florida. It is best adapted to the lighter loam or sandy soils than to the heavy clay lands, and it yields best and produces the best quality of grain on well-drained sandy loam soils that contain a fair supply of lime. It is not limited, however, to such conditions, and it does about as well on acid soils of neutral soils, and is possibly the best grain for planting on sandy lands, which are rough and to a considerable extent exposed to the cold of winter. It is also better adapted to sandy and poorer classes of lands than wheat and will stand a much greater amount of acidity in the soil than either wheat, oats or barley. It is also especially good for drained marsh lands and also for cut-over lands, which are being brought under cultivation for

the first time. Rye should be generally the first crop grown on this character of lands, and it may be grown with equal success on other sandy soils where most cereals fail to succeed, but the growing of rye should not be attempted on lands that are subject to overflow or where water may come or stand for any length of time. If too rich in nitrogen or too much on the order of muck lands, it is likely to cause the rye when grown to fall down, or in other words, to lodge. Neither does rye grow so well on wet lands, but in dryer soils it is much more resistant to cold than wheat or oats. If the land is made too rich, however, this condition is reversed.

Rye in Rotation:

Rye, like all other farm crops, does best when planted in rotation, although it can be grown year after year on the same land with as great degree of success, if not more so, than most small grain crops. This is because few diseases that affect this plant are found in the soil. In many cases rye is grown in place of wheat, and there are many people in the world who prefer rye flour and bread to wheat flour or wheat bread. Rye also takes less from the soil than most of the small grain, unless it be rice, though the difference is slight in any case. One of the best rotations is to follow other crops with rye. For instance, rye can be sown in the corn field after the corn has been gathered, and in this case where the soil has been baked it is best to plow the rye in. The better plan is to use a disk plow and not a turn plow, and follow this by a straight tooth harrow slanted carefully and properly. In this way labor is saved by harrowing in the grain, which is a quicker and more practical way than by plowing in under the ordinary conditions. In disking, the grain in the standing corn stalks will be leveled by the time the grain is ready for harvest; if it is to be harvested, the corn stalks will have decayed to such an extent, at least, that they will not be in the way of the harvest machinery. If it is only intended for grazing, and in

the early Spring and turning under as a green manure crop, should some of the stalks be left standing under these conditions, they will not be in the way.

Varieties:

For Florida, in the sections previously mentioned, there are really only two varieties that can be depended on. These varieties are the Ehruzzes and the South Georgia. Under some circumstances the Ehruzzes seems to be the best, and under other circumstances the South Georgia appears to give best results, but like most grains these also are subject to fluctuations in growth, depending on more favorable location in the one case or in the other. The South Georgia rye, in soils best adapted to its growth, grows perhaps a little taller than the Ehruzzes, but both are excellent ryes and can be depended on. One advantage of the rye crop is that it can be, and is often used to fill gaps between other crops. It can be sown at most any time, early or late fall, on lands that are either rough or well placed, and it will nearly always take care of itself, and make a good growth, which cannot be said of any other grain under like conditions. It is also a good crop to grow on hillsides or on lands that are threatened with washing, and to this extent it is one of the best crops that can be planted. It is an excellent preventer of soil erosion, as it prevents the washing of the soil and the debris down into the valleys, thus holding the soil in place. After the rye has grown to practical maturity, and especially while in the milk stage, it makes an excellent hay if cut at that time and properly cured. It can also be made a good pasture for hogs, and after the hogs have eaten down the grain then the crop can be turned under for manurial purposes. For these purposes it is one of the best winter crops that can be grown. Hogs will harvest the crop and benefit the soil by the dropping of manure in so doing. Rye is also considered a better crop for Fall, Winter and Spring pasture than either

wheat or oats. It does not affect cattle to the extent that oats and wheat does, and it makes a better crop to turn under for green manurial purposes.

Preparing Seed Bed:

While in most cases rye does better than any of the other cereals on poorly prepared soil, it is not a good reason for neglecting the proper preparation of the soil. As the expenses of preparing the soil is very slight and will not be noticed to any appreciable extent, this will be greatly repaid by a much larger yield of grain. The land should be plowed, as a rule, from five to seven inches deep, and it should be done from three to four weeks before planting the seed, if possible. After the land is plowed, it should be well harrowed and made level and as smooth as possible, then allow it to stand for a few days. When rye is to follow a cultivated crop it is best to plow the land three or four inches deep and harrow it well so as to eliminate as much of the grass and weeds as possible. This of course puts the land in better condition. This process can be carried out best by the use of the disk and a straight-toothed harrow. As before stated, cowpea land or corn-stubble land can usually be planted to rye by simply disking and harrowing. It then can be covered, if so desired, by a wide shovel plow running between the rows of the cowpeas or the corn stubble as the case may be. On land that has been properly broken other than corn or stubble land rye may be sown broadcast, but the better way to plant all grain, whether it be rye, wheat, oats or barley, is by drilling with the machine. This machine opens the furrow, sows the seed and covers it with one operation. If sown broadcast it should be disked in and the land well harrowed, which will give a smooth seed bed.

Fertilizers:

Although rye will grow well on very poor soil, comparatively speaking, large yields of the forage or the grain cannot be expected on these soils, neither will rye

succeed well on very rich soils. If grown for green production the land should only be moderately fertilized, nor should these fertilizers contain a too large quantity of nitrogen. This would make the crop top-heavy and liable to fall when the winds blow. Stable manure is the best fertilizer for rye, but acid phosphate should generally be applied with it. It is best to mix forty to fifty pounds of acid phosphate to each ton of stable manure, into a form of compost. In this way each of the ingredients is better and more evenly distributed. There should be a mixture of this kind of two to four tons applied to the acre. If commercial fertilizer only is available, it would be well to apply acid phosphate at the rate of about two to three hundred pounds per acre at the time the crop is sown, and this can be harrowed in with the seed. Cotton seed meal may also be used, but with that there is a liability of getting too much nitrogen, but this should be applied from two to three weeks before the grain is sown. If the rye is grown for pasturage or soil purposes, or for the straw that is in it, then a greater quantity of nitrogen-bearing compound could be applied in the fertilizer, but not otherwise, as it would cause the grain to fall or lodge. To obtain the best stand it is best to re-clean the seed before it is sown. Rye often loses its germinating power, and when this is the case the grain becomes light and can be separated by putting through a wind mill. Even then the seed should be tested for germination. The best thing for sowing of rye depends on the use to be made of the crop. When intended for green production, it is best to sow it about October 1st in Florida in the Northern part and November in the North-Central portion of the State. It is intended as a pasture cover or green manure crop, or for combination purposes, it is best to sow it from two to three weeks earlier, because this gives it a longer season of growth for these several purposes. The rule for the sowing of rye in Florida would be to sow it early enough in each section of the

State so that the roots may become well established before frost or cool weather sets in. After the roots are established rye will stand almost any degree of cold known in Florida. When rye is harvested, if the grain is to be saved, it can be bound in bundles and shocks, the same as wheat, and can be threshed in the same threshing machine that is used for threshing wheat. The usual quantity to sow per acre is about six pecks; or in other words, one bushel and a half. On the sandy loam soils best adapted to rye, from three to six pecks will meet the requirements. When sown for forage or soil purposes, then more seed can be sown, because of the purpose for which the rye is to be used; in other words, it makes more grazing to the acre. As has been indicated in the beginning, rye is one of the best cover and soil crops, as well as for pasturage, that the Florida farmer can plant. It is possibly the best crop of the kind for winter, even better than rape, because of its root system and its ability to prevent soil erosion, as well as supplying a large quantity for pasturage, at a season when green food is scarce for live stock. Every farmer that is interested in the growing of live stock should make it a point to grow a certain acreage of rye for winter pasturage. Let the acreage be in proportion to the number of head of live stock to be pastured; in this way he will protect his soil in the winter and benefit it as well.

OATS IN FLORIDA.

By H. S. ELLIOT, Chief Clerk Department Agriculture.

No farmer should fail to plant this, the most valuable of all feed crops; he can hardly plant too largely, as oats are among the best and safest of all feeds for farm working animals, even better than corn as a single feed ration, as they never produce sickness as corn does. Of course, oats and corn in proper portion are a safer and



Herd of Pigs, Raiford State Farm.

far better feed in combination than singly, and every farmer should always strive to make enough to carry his stock through from season to season. It saves making large quantities of other forage not near its equal in feeding value and much more expensive to produce.

Feed your oats mostly in the sheaf, and your stock will eat the greatest part of the straw, but you should arrange to feed your oats and corn in combination the year round; but plant oats.

In this way you can make more feed to the acre of land than you possibly can on the same acre, no matter what crop you plant on it. You can make it at smaller cost and less work with greater certainty of a good yield than any other. It grows in the winter season when nothing else will, and it requires no cultivation. In this respect it excels corn, and no budworm and weeds are waiting ever ready to destroy it. Oats are easy to plant and easy to grow. Oats and vetch go well together in Florida. Together they will give you a splendid forage crop in the Spring. Cowpeas and velvet beans both will do well after oats, or you can follow with corn, or potatoes. But plant oats, and get the re-cleaned. Fulghum, Appler, Burt, Bancroft, Hundred Bushel, or some other rust-proof variety. Oats is a crop that every progressive up-to-date, real farmer should grow, specially the farmer who does most of his own work. It is equally as good for the farmer who can grow a thousand or more acres, it is a crop that can be planted and harvested by hand or with machinery.

Grow oats and live stock, for between the two they will build up your lands, put money in your pocket and contentment and happiness in your homes. Therefore do not forget that oats is one of the two greatest food and feed-producing crops in the world, therefore one of the most profitable.

There is no special method necessary in planting oats, except that the better the preparation of the seed bed, the better will be the crop. If your lands have been recently

cultivated—say in potatoes or some such crop—or where cowpeas or velvet beans or other legumes have been grown and there has been a thorough cleaning up of sticks and brush of all kinds, a disking of the land one way will be sufficient.

The oats then can be sown on good land at the rate of a bushel and a peck an acre; or, if the land is rather thin, a bushel and a half to three-quarters per acre. Then turn under with a disk harrow across the previous way of the harrowing, and finally smooth the surface all down with a slanting, straight-tooth harrow. This will make the surface of your seed-bed smooth and you will have no difficulty in harvesting your crop.

If the lands have not been previously cultivated then the first thing is to plow them up well with the turn plow. After this the disk harrow and other methods as prescribed above.

Should you have to fertilize the soil, a good manure under the circumstances would be about 400 pounds of acid phosphate—high grade—to the acre, with about 50 pounds of nitrate of soda thoroughly mixed with the acid phosphate.

Next Spring when the oats are growing up well and are beginning to show signs of swelling then sow broadcast 100 pounds of nitrate of soda per acre—this will add at least one-third to your crop.

While you are growing grain of this kind, when you remove the oats, why not follow with a rice crop? This is one of the best and most profitable grain crops that can be grown in Florida, and is well adapted to the lands in all sections of the State. Grow some.

OTHER VALUABLE WINTER CROPS.

There are numbers of valuable grazing crops that should be planted by every farmer for pasture purposes in winter time; among these are harley, rape and vetch. They should be planted singly for the pasturing of hogs.

pigs and calves, or they can be combined into a mixture sown all together—either way is good.

The combination is especially good, as it gives the animals that graze on it a variety of plants to choose whichever they most desire. The pasture mixture comprising harley, rye, rape, vetch, wheat, or oats in equal parts makes a most valuable mixture for pasture purposes. But if not convenient to the farmer any one of these can



Herd of Pigs, State Farm, Ralford.

be planted in the sized patches or areas to suit the requirements. All are good and every farmer should utilize these plants to a greater or less extent.

It will help materially to grow the foliage supplies through the winter, and it will be of great benefit to the live stock. In addition to this it is well not to forget to plant root crops as largely as can be provided for; turnips, rutabagas, beets, collards are all good for poultry, calves and milk stock—likewise pigs.

In addition for the farm table or market, we suggest that you grow cabbages, onions, lettuce and in the proper

seasons Irish potatoes; all of these will cut down store bills and go a long way to supplying the family need with nutritious and palatable and healthful food. It is surprising to what extent grocery bills can be reduced by giving good attention to the gardening end of the farm in the Spring and early Summer.

Irish potatoes this Fall in the North and West have been a poor crop and the chances are that this crop will be in great demand before Florida can get her crop on the market next Spring. We, therefore, believe it would pay to plant a moderate acreage of Irish potatoes.

Do not forget to plant a good acreage of sugar cane or sorghum or both; but be sure to plant one or the other.

GROWING ONIONS IN FLORIDA.

BY H. S. ELLIOT, Chief Clerk Department Agriculture.

This is one of the best crops to plant in Florida for foreign markets as well as home markets, although it is also considered by many writers on agricultural subjects to be one of the most difficult crops to grow. But this is questionable. Of course it has its drawbacks, the principal one of which is having to weed it carefully several times, but if the plants are first grown in seed beds and then transplanted after attaining the height of five to six inches, using good, well-rotted lot manure, as also commercial fertilizers, when you transplant them, weeding and cultivating will not be needed so often, and in that way much labor will be saved. A good many growers complain of the cost and trouble of transplanting them, but we believe that the bulk of experience shows that it does not cost any more to transplant the plants than it does to thin them out and weed them. Another fact in



Field of Tobacco in Leon County.

connection with this is, that with most root plants the yield is better from being transplanted than by growing from seed direct. There is one great advantage that the onion has and why it is suited to Florida soil in general being adapted to the successful growth in all sections of the State, cold weather does not often damage them. The principal variety of onions grown in Florida is the Bermuda. These are raised from seed grown in Teneriffe. The Bermuda onion is considered the best adapted of any other variety to Florida, and is one that we advise all those who wish to grow onions to plant. Bermuda onion growing in Florida is no new industry. They have been grown in this State and shipped to northern markets since in the early eighties, but the demand for them has never been so great until in quite recent years, and is greater today by far than ever.

PLANTING.—Seed may be planted at any time from the middle of August to about the first of January, depending of course, upon the section of the State in which the grower lives or farms, and you can either plant the seed in the field where you wish the plant to grow, or you can plant them in seed beds. Planted in beds, the amount of seed required will be less than where planted in the drill to be thinned out. In the bed it will require from four to five pounds to the acre. In the drill in the field it will require from one-half to one pound additional.

SEED BEDS.—In order to raise the best crops it is necessary, of course, to have good thrifty plants. That means that the seed beds shall be properly prepared, and to obtain this condition it is well to bestow extra care on its preparation. The land best adopted in making the seed beds is that which has not been under cultivation for from two to three years, and on which a crop of leguminous plants, either cow peas or velvet beans, were grown the previous year. Construct your beds in a convenient and protected location, where they can receive prompt attention if necessary. It is also good to scatter

thickly over the beds, some ten days or two weeks before arranging to plant the seed, a heavy dressing of hardwood ashes, and rake them into the soils of the beds. Make the beds just about wide enough to reach across conveniently from either side when sowing the seed or weeding the bed. Make the drills in which you sow the seeds cross-wise of the bed and about six inches apart. Four feet is a good width for the beds, because you can reach at least half way across from either side of the bed. You will find it also a good plan, when first making up the beds to apply a moderate quantity of a good commercial fertilizer in the soil, so that it will thoroughly mix in the soil during future preparation. When you have sown the seed, planting them about three-quarters to an inch in depth, press down the dirt over the seed. One of the best tools for this purpose is a light roller. We make this suggestion because, when the seeds begin to germinate the plant is very tender, and should the rays of the sun be hot or the season dry, the germ or young plant would be killed by the heat. Another suggestion we have found to be good as a great protection against either the sun or the rain, is to stretch cheese cloth lengthwise over the beds. This will protect them against both sun and excessive rains. It also conserves moisture, which will have to be applied in dry seasons. The cheese cloth can be supported by small stakes to which the cloth can be tied anywhere from 8 to 12 inches above the seed bed. When the plants have attained about six inches in height they are ready for transplanting to the field, or if the seed was sown in the field they are ready for thinning and for their first cultivation.

TRANSPLANTING AND CULTIVATION.—The land where the plants are to be planted should be broken and thoroughly prepared, from four to six weeks prior to transplanting. In about three weeks before the transplanting to the field the fertilizers for the field should be applied. If chemical manures are to be used, it should

be sown broadcast, and harrowed in with a light disk harrow, and then re-harrowed with a slanting toothed harrow. If possible, about one ton of good commercial fertilizers should be applied to the field as suggested above. The formula should be about as follows: Ammonia, six per cent; available phosphoric acid, five per cent; and muriate of potash or sulphate, from eight to ten per cent—all broadcasted and harrowed in, in the manner above suggested. In planting the field the rows should be about from fifteen to twenty inches apart, and the plants should be set in the row from six to eight inches apart. Be careful in cultivating the onions, as their roots are shallow or near the surface, and deep cultivation would destroy the root system and retard the growth of the plants. During the period of their growth onions to do their best should have at least two applications of nitrate of soda. The last one should be applied about the time the bulbs are getting into good shape. This will carry them through until they are matured. The varieties that we suggest as the most profitable to Florida growers are about as follows: The Crystal Wax, which is pure white, and the ordinary white, which is to some extent a straw color; it is called white, but it is not entirely so. The Red Bermuda also is a very hardy and thrifty and fine onion, and except for the color is the equal of either of the others. Three other varieties that succeed remarkably well in Florida are the Creole, the Yellow Globe, and Prize Taker.

MATURITY—As soon as the onion tops begin to turn yellow and dry up, the crop can be considered matured. This is usually from the middle of April to the middle of May, depending upon the section of the State in which they are grown. In the far South they have been placed on the market as early as the first of April, but generally the marketing period is within the date first above mentioned. Bermuda onions, or all of those considered herein, are tender and should be handled carefully in the prep-



Tobacco Field in Gadsden County.

aration for market. They should only be pulled when the weather is good, if it can be so arranged. When they are pulled, which is the only proper way to gather them, they should be left long enough, if the weather permits, to dry out. If left in piles for a day or so, they will be in good shape for trimming preparatory to packing and shipping. In trimming them the tops can be best removed by clipping with a pair of scissors or shears, not too close to the bulb. Our advice at the present time to truckers and others to grow onions is based upon the demand, not only arising in this country, owing to war necessities, but for shipment abroad as a part of the supplies which are needed by the United States Government. The indications are that the good prices now existing will be maintained.

GROWING BROOM CORN IN FLORIDA.

(*Andropogon Sorghum Vulgare.*)

By H. S. ELLIOT, Chief Clerk Department Agriculture.

Broom corn, as is well known, resembles sorghum in appearance, both plants being varieties of the same species. The culture of the two plants has much in common. Broom corn usually grows 8 to 12 feet high, though the dwarf variety attains only half that height. The chief economic difference between broom corn and other varieties of sorghum consists in the greater length, strength and straightness of the fine stems composing the head, or panicle, and supporting the seeds. The longer, straighter and tougher these stems or straws and the greener their color after curing, the higher the price the product commands. The variety, the character of the soil and season, and thickness of planting, influence these qualities.

VARIETIES.

The different varieties of broom corn afford dissimilar products. The dwarf variety produces the short brush used in the manufacture of small brooms and whisks. It is somewhat difficult to harvest and is cultivated only to a limited extent. Of the large variety, the Evergreen, known as the Missonri or Tennessee Evergreen, has given general satisfaction. The Mohawk is regarded as the earliest, but as affording a smaller yield. There is some advantage in planting more than one variety and at several different dates so as to extend through a long season the time of harvesting. At a number of the Experiment Stations the Evergreen proved the best of several varieties tested, and was much improved by the selection of seed through several years, the brush becoming longer, stronger, straighter and brighter. In the field from which seed was selected the inferior heads were cut away before shedding their pollen, and thus kept from crossing with the more valuable heads.

CLIMATE, SOIL AND MANURING.

A climate suitable for Indian corn is also adapted to the growth of the broom corn plant. Dry weather at harvesting time is a favorable climatic condition. A well-drained, rich, sandy or gravelly loam soil such as will produce a heavy yield of Indian corn, and is as free as possible from weeds, is best for broom corn. If the soil is not fertile it should be liberally manured. Fine, thoroughly rotted barn-yard manure, and other nitrogenous fertilizers may be used with advantage, preferably in the rows or drills, in order to hasten the growth of the young plants which are usually small and delicate. In general it may be said that the system of manuring followed should be practically the same as that found best adapted to corn in the same locality, and will depend largely upon the character of the soil.

MANNER OF PLANTING.

There are two methods of planting which may be followed, namely: surface planting and listing. Either of these methods, if carefully followed, will give good results. In sections where listing is practiced the soil should receive some previous preparation, and the listed rows need not be more than three or four inches deep. This is plenty deep enough to secure all of the advantage of this system, and there will be little danger in covering the young plants at the time of the first cultivation. The broom corn seed can be planted with an ordinary corn planter which is provided with Kaffir corn plates, or it may be put in with an ordinary grain drill by blocking the proper number of feed holes so that the rows may be given the correct spacing. The seed of the dwarf varieties are usually planted in rows 36 inches apart, and enough material is used to secure a stand of one plant to every four to eight inches in the row. The standard sorts are given greater spacing, the rows being placed at least 42 inches apart, and twelve to fifteen inches in the row. It will require three to five pounds of seed to give the proper stand. Where the seed is first class in quality, and will give a germination test of 90 to 95 per cent, the minimum quantity may be planted; however, if the seeds contain a large amount of trash and have been damaged to a slight extent so that the vitality has been impaired, much more seed should be sown.

CULTIVATING THE CROP.

The cultivation of broom corn is similar to that given to corn or sorghum. The early growth of the plant is slow, hence the need of prompt and shallow cultivation to keep the weeds in subjection and to maintain a thin layer of loose soil on the surface.

In the culture of broom corn the value of rotation of crops is not thoroughly appreciated, and it is sometimes -

grown for many years in succession on the same land. If the stalks are plowed under and the seeds returned to the soil either in their green state or are fed to animals and the manure obtained applied to the soil, the draft on the soil is not very heavy. However, continuous culture, even of crops removing but small quantities of fertilizer ingredients, will eventually impoverish the soil, especially when, as is sometimes the case with broom corn, the stalks are burned on the land. Better crops will generally be secured when broom corn enters into the regular farm rotation, or when an occasional crop of clover, cow peas, or other leguminous plants are grown on the land usually devoted to it.

As soon as the young plants are two or three inches high cultivation should be commenced. If a good stand has been secured, some thinning may be done with the smoothing harrow or weeder by giving cross cultivation. Where the stand is ideal, these implements can be run lengthwise of the row, and they will assist in stirring the soil at a time when the regular cultivator cannot be manipulated. Such treatment will not only stir the surface and aid in holding the moisture for the crop, but it will destroy many small weeds which make their appearance early in the season. The broom corn will probably be large enough to permit the use of the regular corn cultivator fifteen days or three weeks after planting. A machine which is provided with five or more narrow shovels per section adjusted to run at a shallow depth will give better results than an implement which carries two or three shovels per section. Cultivation should be continued through the growing season at intervals of ten days or two weeks. This will keep the surface in proper condition, will afford ample protection against weeds, and will assist in conserving the stores of moisture. Later in the season the soil may be stirred with a one-horse five-tooth cultivator. This practice is not common in broom corn sections, but is a practice which has been adopted

by many in cultivating common corn, and it ought to give equally good results in broom corn culture.

QUALITY OF BRUSH.

The market demands a brush of fresh green color; hence the heads should be free from red stains or other color. In order to secure brush of the desired color it is necessary to harvest just as the plants are coming into full bloom. If the crop is allowed to remain on the stalks for a longer period than this and moist weather occurs, then the heads that remain enclosed within the leaf sheath will have a tendency to turn red, plant lice also work on such heads and may bring about a reduction in the quality of brush. Over-ripeness and exposure to the hot sun will discolor the straw; thus it is absolutely necessary that the crop be harvested at a time when the heads are prime in quality.

HARVESTING AND CURING.

The chief difficulty encountered by the novice in broom corn culture is in determining when to harvest the brush. Even experienced growers are not unanimous on this point, some cutting the heads while in blossom, and others harvesting later so as to obtain better developed seeds possessing considerable nutritive value. The time generally preferred is just after the fall of the so-called "blossoms" (anthers). When the saving of more matured seed is a consideration the head may be bent down by sharply bending the stalk at a point 12 to 18 inches below the base of the head. Thus the seeds while filling hang down and tend to keep the brush straight. This "lopping," if practiced at all, is done after the head has attained its full length, but before the seeds acquire much weight. It is not practiced by large growers. A common custom with tall varieties at time of harvesting is to bend down

the stalks of two rows diagonally toward each other in such a manner that the bent parts support each other in a nearly horizontal position. The stalks of one row cross diagonally those of the other and form a platform, or "table." The break, or rather the sharp bend, in the stalk is made about $2\frac{1}{2}$ or 3 feet above the ground. The brush borne on one row projects over and beyond the other row in a position convenient for the cutter who follows immediately. The heads with five inches of stalks are laid on the table, or platform, until they can be removed to a drying shed.

Cutting while the plants are wet with dew or rain should be avoided. The brush of the dwarf variety is pulled, not cut. If the season is dry and the corn approaches maturity the brush remains straight, but if the weather is hot and damp at this period the straws are likely to bend and to form crooked brush. In harvesting and in curing great pains are taken to keep the brush straight. Crooked or tangled brush is carefully sorted out.

From the field the brush is taken to the scrapers, which removes the seed. Large growers of broom corn employ special scraping machines, consisting of one or two cylinders provided with iron teeth and usually driven by horsepower. The most complete scrapers are provided with an automatic feeding arrangements. With cheaper machines the operator holds the seed end of a handful of brush against the cylinder until the seed are removed. It is stated that the ordinary threshing machine, with concave removed, has been used in a similar manner. For small quantities of brush a long-toothed currycomb, or a wooden comb made by sawing teeth in a plank has been used. The brush should be cured in the shade, as exposure to sun injures the color and strength. Free circulation of air is necessary in this process. Hence when large quantities are to be cured special curing houses thoroughly ventilated and provided with racks made of narrow

planks and lathe are constructed. On these racks layers of brush 3 inches thick are laid. Curing is continued until the brush will not heat when baled, or baled.

When cured the brush is pressed into bales, usually 46x30x24 inches and weighs about 300 pounds. The butts are placed evenly at the ends of the bale and the pieces of "brush" lap in the middle. The labor of harvesting and curing makes it considerably more expensive to grow an acre of broom corn than a similar area of Indian corn. Greater skill is also required in handling the former crop. As regards feeding value the broom corn plant is inferior to Indian corn and to the non-saccharine sorghums such as Kaffir corn, dura, milo maize, etc., being poorer in the valuable nutritive constituents (fat and protein) and richer in the indigestible fiber. The chemical composition of the ripe seed, however, indicates that it is but slightly inferior to corn kernels as food.

The following table shows how broom corn compares with Indian corn in this respect:

FOOD CONSTITUENTS OF BROOM CORN AND INDIAN CORN.

	Water	Water-Free Material.				
		Ash	Protein	Fiber	Nitrogen-free Extract	Fat
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Broom corn plant	9.4	6.3	4.3	46.6	40.8	2.0
Corn plant	42.2	5.6	8.8	24.1	58.9	2.6
Broom corn seed	14.1	2.3	11.2	8.3	74.1	4.1
Corn kernels ...	10.9	1.7	11.7	2.4	78.1	6.1

Little use as a food is generally made of the broom corn fodder beyond letting the cattle run in the field after the harvest. As the above table shows, the seed, when allowed to ripen, has considerable nutritive value, but since it is

necessary in securing the best grade of brushes to harvest the heads green it has been found difficult to cure the seed obtained from them. Success in preserving the green seed in air-tight silos has been reported, so that by this process a cattle food of considerable value may be economically obtained. The yield of seed varies greatly, and on the average probably approximates the quantity afforded by sorghum grown for syrup.

MARKETING THE CROP.

The grower ought to acquaint himself with the market requirements in the case of this crop, and the heads which come up to the standard should be selected for planting the seed patch next year. Since broom corn should be pulled before the seeds mature, every grower should set aside a small plot for the production of his seed. After the first season, choice heads can be selected for planting the plot next year, and the remaining portion of the seed from this plot can be used for the commercial field. By adopting this method the quality of the brush can be improved from year to year. Inasmuch as broom corn crosses readily with other plants which belong to the same class, the seed plot should be well protected. A good grade of brush comes or may be had only through careful selection. The seed plot may also afford an opportunity for testing the productive capacity of the various types, and will enable the grower to single out those strains which have outstanding features. Better cultivation will undoubtedly add to the output of brush; a systematic plan of seed selection will surely improve the quality of the broom corn.

ANALYSES OF FLORIDA MUCK SOILS.

SOIL ANALYSIS.

COMPILED

BY R. E. ROSE STATE CHEMIST.

Frequently samples of soil are sent to the Chemical Division for analysis, with a request to advise as to the best methods of fertilizing. There is but little information to be derived from a soil analysis that would be of benefit to farmers. So much depends on tilth, drainage, culture and other physical conditions, that chemical analysis made under laboratory conditions is of little value.

A chemical analysis of soil may indicate a very fertile soil, rich in plant food, while the facts are the soils are not productive. This is instanced by the rich Sawgrass muck lands and river bottoms of the State, that are fertile chemically, but not productive until properly drained; also, by the arid lands of the West, rich in the elements of plant food, but not productive until irrigated. Other soils, with less plant food, but on account of proper physical conditions, culture and tilth, are exceedingly productive.

R. E. ROSE, FLORIDA STATE CHEMIST 1908.

The average of thousands of analyses of Florida soils made by the Florida Agricultural Experiment Station and the State Laboratory is as follows:

Nitrogen (per cent.).....	0.0413
Potash (per cent.).....	0.0091
Phosphoric Acid (per cent.).....	0.1635

This is a fair average of all the Norfolk and Portsmouth soil series of the State, which comprise by far the greater portion of the State.

The following conclusions as to the value of chemical analyses of soils, alone, without considering other factors—drainage, culture, physical and biological conditions of the soil under consideration, as to its productiveness, are those now generally accepted by experiment station, practical and scientific agriculturists, chemists and biologists:

“ * * * Hence, for a chemist to have stated that a given soil was necessarily productive because he had found present in it all of the elements that plants required in growth, would have been a great mistake, for a practical test would have often proved his statement false.”

“There is probably no one subject in connection with their profession, that is so little understood by farmers generally, as that of the real value to be attached to a chemical analysis of a soil. Indeed, I may say, that there is scarcely a question that is the subject of so much discussion and disagreement, even among the agricultural chemists of the country, as that of the real importance to be attached to such an analysis.”

“It will be seen that the weak point in an analysis is that, while it reveals what a soil actually contains and in what proportions the several constituents are present, it does not state with absolute accuracy just how much of that plant-food is in an available form, i. e., in a form suited for plant assimilation.”

“While a chemical analysis cannot definitely answer everything in connection with the above queries, still it can aid very much in solving all such problems, and, together with a physical analysis, can contribute much valuable information along such lines.”

(A. A. Persons, Florida Agricultural Experiment Station, 1897.)

“It is generally admitted that the productive-

ness of a soil cannot be determined by a mere chemical analysis alone. True, the analysis will show what elements are present and in what quantities, but it does not show what is absolutely available for the immediate use of the plant. Of two soils showing great similarity in chemical composition, the one may be highly productive and the other very unproductive. The reasons for this may possibly be found in different moisture conditions, or a difference in physical texture, or in the difference in the amount of available plant food, or in a combination of all these differences. The chemical analysis may, however, be of value in showing what the possibilities of the soil are under the proper treatment."

"This subject has been studied by the agricultural chemist, the soil physicist, and the practical farmer, and all have contributed to the fund of knowledge."

(A. W. Blair, Florida Agricultural Experiment Station, 1906.)

"The Experiment Station does not analyze samples of soil to determine the fertilizer requirements. There is no chemical method known that will show reliably the availability of plant food elements present in the soil, as this is a variable factor, influenced by the kind of crop, the type of soil, the climate and biological conditions; hence we do not recommend this method of testing soil."

(Agricultural Experiment Station, Purdue University, 1908.)

The foregoing facts and opinions are drawn from practical experience, and scientific deduction, after careful investigation by competent scientific observers, establishes the fact that a chemical analysis of soil is of little value to the practical farmer, and that correct deduction can

not be drawn without a personal knowledge of all the physical and biological conditions—drainage, tilth, culture, season, and other local factors, necessary to be considered in passing upon the fertility or productiveness of a soil.

Tallahassee, Fla., June, 1915.

MUCK SOIL ANALYSES.

Numerous inquiries for the analyses of muck soils, particularly of Everglade and other saw grass mucks, having exhausted the reports of the State Chemist for 1912 and 1914, while Bulletin No. 43 of the Florida Agricultural Experiment Station, *A Chemical Study of Some Typical Soils of the Florida Peninsular*, by Prof. A. A. Persons, is also out of print, I have compiled a number of analyses of Florida muck soils as reported in these publications.

It will be noted that there is little difference in the Nitrogen (Ammonia) content in pure mucks, that is, mucks not mixed with sand. Where the Insoluble Matter (sand) is considerable, the Nitrogen (Ammonia) is proportionately less. Sand is therefore the principal adulterant found in Florida muck soils. Sandy subsoils contain notably less Nitrogen than the pure mucks found in deep beds—three to ten feet. Shallow muck beds—one to two feet—necessarily contain more sand and less Nitrogen.

Beds of muck deposited in still water, not affected by drains or runs of sandy water during freshets, sand bars, or ridges, have a uniform high Nitrogen content. The uniformity of the Nitrogen content is notable and is naturally greatest in those specimens having but a small percentage of sand.

R. E. ROSE, State Chemist.

Tallahassee, Fla., September, 1917.

ANAYSES OF FLORIDA MUCK SOILS.

BY R. E. ROSE, STATE CHEMIST.

Hundreds of analyses of muck soils from all parts of the State have been made—saw grass muck, pond muck, hay head muck, etc. The physical characteristics vary considerably, depending entirely on the state of decay or decomposition.

Muck constantly covered with water does not decay or rot.

Muck occasionally exposed to the air (partial drainage) decomposes and becomes a fine-grained soil.

Perfect drainage will cause any muck bed to decay, rot, or decompose and become a fine-grained garden mould. Imperfect drainage will not.

The average of all muck soil analyses shows as follows:

Nitrogen (as ammonia)	3.10%
Phosphoric Acid	0.18%
Potash	0.08%

It will be noted that there is sixty times as much Nitrogen (Ammonia), with practically the same percentage of Phosphoric Acid, and nearly nine times as much Potash as found in the average sandy soils of the State.

This great excess of nitrogen, when made available by proper drainage, deep plowing and proper culture, assisted by phosphoric acid and potash, thus providing the necessary media for the growth of the nitrogenous ferments (nitrogen-forming bacteria), insures large crops on properly drained and cultivated muck soils, wherein the nitrifying agencies of the air, together with properly encouraged bacteria, have made the enormous supply of nitrogen available to plant growth.

Nitrogen induces foliage development, hence is largely necessary for such crops as cabbage, lettuce and celery, while potash and phosphate tend to produce starch, sugar and seed, and to make firm, heavy fruit, that will bear shipment, with less danger of decay. Hence the economy

of adding phosphate and potash to muck soils, which require—

First. Perfect drainage, to get rid of stagnant, acid water, and allow the air to enter the soil to oxidize, or rot it.

Second. An addition of phosphoric acid and potash to form a media to aid in developing the nitrogenous bacteria, necessary to make the nitrogen available, and to aid in forming starch, sugar and seeds. While properly drained, deeply plowed muck soil will produce large crops without adding phosphate or potash, the great excess of nitrogen and, comparatively, small amount of potash and phosphate, necessarily makes the addition of these two elements economical and profitable, by the increase in yield and better shipping quality of the vegetables and fruits. Hence the application of 500 to 1000 pounds of 16% acid phosphate and 100 to 200 pounds of 50% Sulfate (or Muriate) of Potash, or 1000 to 2000 pounds of unleached ashes, carrying 6% of potash and 40% Carbonate of Lime, is an economical addition.

MUCK AS A FERTILIZER.

The application of sour, freshly-dug, undecomposed muck, or peat, to sandy soils as a fertilizer or amendment, or to add humus to a sandy soil, is of little or no value. As said by a noted Florida grower, "It is a harmless though costly amnsement." Such raw, undecomposed, acid muck, applied to sandy soil, simply dries out (carbonizes), its nitrogen dissipates, leaving nothing but carbon (charcoal) in the soil. Hence, the application of raw, sour, undecomposed muck to ordinary sandy soils is not advisable, as it is not economical.

MUCK COMPOSTS—MANURE.

If newly-dug, raw, acid, undecomposed muck be composted, using 500 pounds of 16% acid phosphate and 100 pounds of 50% sulfate (or muriate) of potash to each

cord of wet muck (128 cubic feet), well distributed throughout the heap, the heap kept moist (not wet), broken down and turned several times, in two months a cord (some three tons) of excellent manure, will be obtained. Where practical, a few barrow loads of fresh stable manure added to this heap, will hasten decomposition, add nitrifying bacteria, and aid largely in making available the inert nitrogen in the raw muck.

(The heap should be kept moist at all times (not wet). Never allow it to overheat or "fire fang," nor to dry out. If necessary, turn the heap, dampen it (to cool it off), and again heap it up.

The "compost heap" is the "Bank" from which the French, German, Belgian, Dutch and Swedish farmers—the best farmers in the world—draw their supplies of plant food. On the size and quality of the compost heap, the credit of these farmers is based.

When the dairy cow, the pig, the silo, and the compost heap, which can be greatly enhanced in size by the muck pond, become more in evidence in the South, and particularly in Florida, the problem of rural credits, commercial fertilizer, and crop mortgages, will naturally be settled by the farmer becoming the lender, and not the borrower; the financial master, not the slave.

MUCK IN STABLES AND BARN LOTS.

An economical method of utilizing muck is to employ it as a bedding in horse and cow stalls, to absorb the liquids, the most valuable portion of the manure.

Place six to twelve inches of raw muck (fairly dry) in each stall, in which mix acid phosphate and potash in the proportions given for the compost heap. By this means ten tons of first-class stable manure may be obtained, where one would be, under ordinary conditions.

The secret of a good compost heap (or manure heap), particularly in Florida, is to keep the heap moist (not wet), and avoid over-heating—"fire fang."

This can readily be accomplished by breaking down the heap, dampening, and again heaping up. The Sulfate of Lime (Gypsum) which composes some sixty per cent of acid phosphate (which, by the way, is not acid) will prevent the escape of nitrogen as ammonia, but will absorb it as Sulfate of Ammonia; soluble, but not volatile.

The contrary effect is had by the use of Lime Carbonate, or Oxide (burnt lime), or wood ashes, which have a tendency to decompose the nitrogenous matter and allow it to escape as ammonia. Hence the application of lime carbonate, or oxide, or wood ashes, to a manure pile is a blunder, while the application of acid phosphate—Gypsum (Lime Sulfate), and phosphate—is advisable.

IMPERFECTLY DRAINED MUCK SOILS.

There are many instances, particularly in Florida, of imperfectly drained muck soils—tracts adjacent to canals or drains, in which insufficient lateral or field ditches have been cut. The surface water has been to a greater or less degree removed by the canals or drains, while the sour, acid water in the soil still remains.

Frequently this land becomes dry from evaporation, though the acids are not removed. On the contrary, the acids are concentrated by this evaporation. Such soils naturally fail to produce cultivated crops.

Often an attempt to correct this acid condition by the application of lime is made. Such an application to such soils, not provided with the necessary field ditches, is but an expedient, and of no permanent benefit. The acids naturally continue to form, and in a comparatively short time neutralize the lime.

There is but one reliable method of removing acid from muck soils (slowly decomposing vegetable matter), and that is by thorough drainage, allowing the rains to fall upon, pass down and through the soil, into the drains, which must be kept open (even in the driest weather).

by this means washing out (draining away) the constantly accumulating acids.

There are a large number of such imperfectly drained tracts of muck soil in the State, unproductive and disappointing, partially drained, and generally dried by evaporation to a considerable extent, still for the want of drainage, sour, undecomposed, and unfit for cultivated crops. These same soils, properly drained by the necessary field ditches, at intervals of say 105 feet (one-half acre) at least three feet deep, with fall or slope sufficient to drain the soils not less than three feet below the surface, will in a short time (after one or more rainy seasons), be freed of their superabundance of acid and become productive.

The application of phosphate and potash, after thorough drainage, together with an application of ground lime stone, will materially hasten the process of decomposing the vegetable matter, forming a rich, productive mould, or soil, a condition impossible on partly (shallow) drained muck, in which there are no field drains to remove the sour, acid waters from the zone which should be occupied by living bacteria, and the roots of healthy plants.

Such thoroughly drained soils, deeply plowed and thoroughly decomposed (rotted), changed from a peat or muck into soil, will not suffer for moisture, even in the driest seasons in Florida, though crops on imperfectly drained land do suffer by the concentration of acid in the soil, by evaporation, during dry weather, thus bringing the acids of the lower soils to the surface (acids which should be removed by drainage).

This problem now confronts the farmer on much of the irrigated soils of the West, where drainage has been neglected—in this case the alkali, dissolved by the irrigation waters, not being provided with drainage, is brought to the surface by evaporation, where the alkali remains, soon changing the fields into alkaline bogs, of no agricul-

tural value. When provided with drains, this condition is corrected, and the irrigated land becomes wonderfully productive.

The same thing occurs in Florida, except that acid—not alkali—is the substance that must be gotten rid of. Fortunately, with our humid climate, with some 60 inches of rainfall, the acids of our muck soils can be rapidly gotten rid of by washing them out, through properly constructed drains, with sufficient fall or slope.

Tallahassee, Fla., June 18, 1915.

EXTRACT FROM STATE CHEMIST'S REPORT. 1912.

ANALYSES OF EVERGLADES SOILS.

The following analyses of Everglades soils, 34 samples taken at various points in the Everglades, from Lake Okeechobee to the Miami River, near the banks of the State Canals, are located on the accompanying map.

The samples were taken in duplicate by representatives of the United States Agricultural Department, and the Drainage Commissioners of the State of Florida.

The surface soils samples are taken from the surface to 12 inches deep, the subsoils from 12 inches to 36 inches deep.

The average of the series shows:

Ammonia (NH_3)	3.10%
Phosphoric Acid (P_2O_5)	0.18%
Potash (K_2O)	0.08%

All samples are on an air dry basis.

The Ammonia (Nitrogen) determinations are made by the official modified Gunning Method for fertilizer. The Potash and Phosphoric Acid determinations by the official method for fertilizers.

M. 1784—Maximum Ammonia	4.41 %
Soil Sample No. 29.	
M. 1793—Minimum Ammonia	0.44 %
Sandy Sub-soil No. 38.	
M. 1792—Maximum Phosphoric Acid.....	0.53 %
(Evidently added phosphates on cultivated soil.)	
Soil No. 37.	
M. 1795—Minimum Phosphoric Acid.....	0.04 %
Sub-soil No. 42.	
M. 1770—Maximum Potash	0.175%
Sub-soil No. 14.	
M. 1790—Minimum Potash	0.03 %
Soil No. 35.	
M. 1793—Minimum Potash	0.03 %
Sub-soil No. 37.	

EVERGLADE SOILS.

Samples taken from Lake Okeechobee to Miami, near Banks of State Canals.

M. 1765—Everglades Soil No. 9.	
Surface soil, S. New River Canal, NE. $\frac{1}{4}$ Sec. 4, T. 46, R. 35.	
Moisture	12.06 %
Ammonia	3.35 %
Phosphoric Acid	0.26 %
Potash	0.115%
M. 1766—Everglades Soil No. 10.	
Sub-soil No. 9.	
Moisture	12.22 %

Ammonia	3.52 %
Phosphoric Acid	0.10 %
Potash	0.085%

M. 1767—Everglades Soil No. 11.

Surface soil, shores of Lake Okeechobee.

Demonstration Farm, West of S. New River
Canal. Cultivated field.

Moisture	13.81 %
Ammonia	3.72 %
Phosphoric Acid	0.13 %
Potash	0.105%

M. 1768—Everglades Soil No. 12.

Sub-soil No. 11.

Moisture	11.46 %
Ammonia	2.94 %
Phosphoric Acid	0.098%
Potash	0.115%

M. 1769—Everglades Soil No. 13.

West side of S. New River Canal, near Lake
Okeechobee.

Virgin soil.

Moisture	11.29 %
Ammonia	2.86 %
Phosphoric Acid	0.28 %
Potash	0.165%

M. 1770—Everglades Soil No. 14.

Sub-soil of No. 13.

Moisture	10.38 %
Ammonia	2.36 %
Phosphoric Acid	0.37 %
Potash (Maximum)	0.175%

M. 1771—Everglades Soil No. 15.

South New River Canal, near Lake Okeechobee. Cultivated land.

Moisture	13.04 %
Ammonia	3.37 %
Phosphoric Acid	0.30 %
Potash	0.105%

M. 1772—Everglades Soil No. 16.

Sub-soil of No. 15.

Moisture	11.06 %
Ammonia	2.56 %
Phosphoric Acid	0.21 %
Potash	0.115%

M. 1773—Everglades Soil No. 17.

Sec. 11, T. 45, R. 38, East of Hillsboro Canal.

Moisture	13.43 %
Ammonia	4.37 %
Phosphoric Acid	0.20 %
Potash	0.07 %

M. 1774—Everglades Soil No. 18.

Sub-soil of No. 17.

Moisture	13.17 %
Ammonia	3.64 %
Phosphoric Acid	0.05 %
Potash	0.06 %

M. 1775—Everglades Soil No. 19.

Sec. 14, T. 46, R. 39, 25 miles from Lake Okeechobee, East of Hillsboro Canal.

Moisture	12.09 %
Ammonia	4.05 %
Phosphoric Acid	0.11 %
Potash	0.095%

M. 1776—Everglades Soil No. 20.

Sub-soil of No. 19.

Moisture	12.82 %
Ammonia	2.82 %
Phosphoric Acid	0.05 %
Potash	0.07 %

M. 1777—Everglades Soil No. 21.

Sec. 9, T. 47, R. 32 miles from Lake Okeechobee, North of Canal.

Moisture	12.12 %
Phosphoric Acid	0.15 %
Potash	0.04 %

M. 1778—Everglades Soil No. 22.

Sub-soil of No. 21.

Moisture	11.16 %
Ammonia	3.71 %
Phosphoric Acid	0.06 %
Potash	0.04 %

M. 1779—Everglades Soil No. 23.

Sec. 29, T. 47, R. 41, North of Canal.

Moisture	11.83 %
Ammonia	3.06 %
Phosphoric Acid	0.09 %
Potash	0.07 %

M. 1780—Everglades Soil No. 24.

Sub-soil of No. 23.

Moisture	12.74 %
Ammonia	3.00 %
Phosphoric Acid	0.06 %
Potash	0.06 %

M. 1781—Everglades Soil No. 25.

Cleared land on border of Lake Okeechobee,
West of N. New River Canal. Virgin soil.

Moisture	10.84 %
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	Ammonia	2.89 %
	Phosphoric Acid	0.32 %
	Potash	0.105%
M. 1782—	Everglades Soil No. 27.	
	1¼ mile S. of Lake Okeechobee, on West side of N. New River Canal.	
	Moisture	10.19 %
	Ammonia	2.97 %
	Phosphoric Acid	0.46 %
	Potash	0.085%
M. 1783—	Everglades Soil No. 28.	
	Sub-soil of No. 27.	
	Moisture	11.65 %
	Ammonia	3.32 %
	Phosphoric Acid	0.20 %
	Potash	0.115%
M. 1784—	Everglades Soil No. 29.	
	East side of N. New River Canal, 10 miles S. of Lake Okeechobee.	
	Moisture	12.54 %
	Ammonia (Maximum)	4.41 %
	Phosphoric Acid	0.29 %
	Potash	0.05 %
M. 1785—	Everglades Soil No. 30.	
	Sub-soil of No. 29.	
	Moisture	14.06 %
	Ammonia	4.32 %
	Phosphoric Acid	0.20 %
	Potash	0.05 %
M. 1786—	Everglades Soil No. 31.	
	Center of Sec. 29, T. 48, R. 39, West of N. New River Canal.	
	Moisture	14.00 %
	Ammonia	3.72 %

Phosphoric Acid	0.14 %
Potash	0.07 %

M. 1787—Everglades Soil No. 32.

Sub-soil of No. 31.

Moisture	11.08 %
Ammonia	3.12 %
Phosphoric Acid	0.06 %
Potash	0.06 %

M. 1788—Everglades Soil No. 33.

SE. $\frac{1}{4}$ Sec. 34, T. 49, R. 39, South of Canal.

Moisture	13.41 %
Ammonia	3.51 %
Phosphoric Acid	0.18 %
Potash	0.08 %

M. 1789—Everglades Soil No. 34.

Sub-soil of No. 33.

Moisture	13.28 %
Ammonia	2.98 %
Phosphoric Acid	0.06 %
Potash	0.05 %

M. 1790—Everglades Soil No. 35.

Center of Sec. 3, T. 50, R. 40, North of Canal.

Moisture	13.04 %
Ammonia	3.12 %
Phosphoric Acid	0.17 %
Potash (Minimum)	0.03 %

M. 1791—Everglades Soil No. 36.

Sub-soil of No. 35.

Moisture	11.04 %
Ammonia	3.42 %
Phosphoric Acid	0.11 %
Potash	0.07 %

- M. 1792—Everglades Soil No. 37.
 "Musa Isle" Grove, South of Miami Canal.
 Cultivated soil —evidently added Phosphate.
 Moisture 9.02 %
 Ammonia 2.33 %
 Phosphoric Acid (Maximum) 0.53 %
 Potash 0.05 %
- M. 1793—Everglades Soil No. 38.
 Sub-soil of No. 37. Sandy sub-soil.
 Moisture 1.52 %
 Ammonia (Minimum) 0.44 %
 Phosphoric Acid 0.24 %
 Potash (Minimum) 0.03 %
- M. 1794—Everglades Soil No. 41.
 Center of Sec. 11, T. 53, R. 40.
 Moisture 14.86 %
 Ammonia 3.47 %
 Phosphoric Acid 0.11 %
 Potash 0.085 %
- M. 1795—Everglades Soil No. 42.
 Sub-soil No. 41.
 Moisture 13.14 —
 Ammonia 3.60 %
 Phosphoric Acid (Minimum) 0.04 %
 Potash 0.06 %
- M. 1796—Everglades Soil No. 43.
 NE. $\frac{1}{4}$ Sec. 31, T. 52, R. 40.
 Moisture 11.63 %
 Ammonia 3.44 %
 Phosphoric Acid 0.15 %
 Potash 0.06 %
- M. 1798—Everglades Soil No. 45.
 E. $\frac{1}{2}$ Sec. 9, T. 52, R. 39.
 Moisture 12.32 %

Ammonia	4.07 %
Phosphoric Acid	0.13 %
Potash	0.07 %

11. 1799—Everglades Soil No. 46.

Sub-soil No. 45.

Moisture	12.38 %
Ammonia	3.67 %
Phosphoric Acid	0.25 %
Potash	0.07 %

NOTE,—Numbers 1792 and 1793—soil No. 37 and sub-soil No. 38—taken from "Musa Isle Grove"—a cultivated orange grove, have evidently been fertilized with commercial fertilizers, particularly phosphates.

2—Soil.

EXTRACT FROM STATE CHEMISTS REPORT, 1914.

ANALYSES OF MUCK SOILS FROM THE UPPER
ST. JOHNS VALLEY.

M. 2005—Muck Soil No. 1 (12-inch surface. Sec. 1.
Fellsmere, Fla.

Air Dry Sample.

Moisture	= 17.87 %
Nitrogen	= 2.35 %
Volatile matter	= 91.76 %
Involatile matter (ash)	= 8.24 %
Insoluble matter (sand)	= 4.46 %
Phosphoric acid	= 0.024 %
Potash	= 0.041 %
Lime	= 0.83 %
Iron and alumina	= 1.92 %

M. 2006—Subsoil No. 1 (12 to 36 in.) Secs. 2 and 3,
Fellsmere, Fla.

Air Dry Sample.

Moisture	= 14.70 %
Nitrogen	= 1.76 %
Volatile matter	= 72.91 %
Involatile matter (ash).....	= 27.09 %
Insoluble matter (sand).....	= 21.81 %
Phosphoric acid	= 0.050%
Potash	= 0.058%
Lime	= 1.62 %
Iron and alumina.....	= 2.80 %

M. 2007—Muck Soil No. 2 (12-inch surface), Myrtle
hammock on ditch N, 12, near lateral canal
N, Fellsmere, Fla.

Air Dry Sample.

Moisture	= 18.04 %
Nitrogen	= 2.38 %
Volatile matter	= 87.88 %
Involatile matter (ash).....	= 12.12 %
Insoluble matter (sand).....	= 7.35 %
Phosphoric acid	= 0.148%
Potash	= 0.073%
Lime	= 2.55 %
Iron and alumina.....	= 1.38 %

M. 2008—Muck Soil No. 3 (18-inch surface). Sec. 1,
corner of lateral canal Q and railroad ditch,
Fellsmere, Fla.

Air Dry Sample.

Moisture	= 16.35 %
Nitrogen	= 3.39 %
Volatile matter	= 95.70 %
Involatile matter (ash).....	= 4.30 %
Insoluble matter (sand).....	= 1.72 %
Phosphoric acid	= 0.100%

Potash	0.052%
Lime	1.29 %
Iron and alumina.....	0.52 %

- M. 2009—Subsoil No. 3 (18 to 36 inches). Sec. 2, corner of lateral canal Q and railroad ditch, Fellsmere, Fla.

Air Dry Sample.

Moisture	16.75 %
Nitrogen	2.76 %
Volatile matter	95.32 %
Involatile matter (ash).....	4.68 %
Insoluble matter (sand).....	0.71 %
Phosphoric acid	0.058%
Potash	0.028%
Lime	1.52 %
Iron and alumina.....	1.78 %

- M. 2010—Soil No. 4 (18-inch surface). Sec. 1, corner of lateral M and railroad ditch, Fellsmere, Fla.

Air Dry Sample.

Moisture	17.18 %
Nitrogen	2.99 %
Volatile matter	95.74 %
Involatile matter (ash).....	4.26 %
Insoluble matter (sand).....	1.55 %
Phosphoric acid	0.180%
Potash	0.043%
Lime	1.68 %
Iron and alumina.....	0.71 %

- M. 2011—Subsoil No. 4 (18 to 39 inches). Sec. 2 and 3, corner of lateral M and railroad ditch, Fellsmere, Fla.

Air Dry Sample.

Moisture	16.55 %
Nitrogen	2.52 %
Volatile matter	92.84 %
Involatile matter (ash).....	7.16 %

Insoluble matter (sand).....	=	1.55 %
Phosphoric acid	=	0.072 %
Potash	=	0.030 %
Lime	=	2.95 %
Iron and alumina.....	=	1.71 %

EXTRACT FROM BULLETIN NO. 43 OF THE AGRICULTURAL EXPERIMENT STATION—1897.

BY A. A. PERSONS.

No. 16—Dade County Saw Grass Muck.

Moisture at 100° C.....	3.9300 %
Nitrogen	1.2300 %
Insoluble matter (sand).....	59.8035 %
Phosphoric acid (P_2O_5).....	0.1472 %
Potash (K_2O)	0.0260 %
Lime (CaO)	3.9850 %
Iron and alumina.....	2.5803 %

No. 53—Dade County Reclaimed Bay Muck.

Moisture at 100° C.....	7.2350 %
Nitrogen	1.4560 %
Insoluble matter (sand).....	43.0630 %
Phosphoric acid (P_2O_5).....	0.1120 %
Potash (K_2O)	Trace
Lime (CaO)	0.1500 %
Iron and alumina.....	3.3470 %

No. 54—Dade County Reclaimed Bay Muck.

Moisture at 100° C.....	7.1750 %
Nitrogen	1.3300 %
Insoluble matter (sand)	48.7350 %
Phosphoric acid (P_2O_5)	0.0480 %

Potash (K_2O)	0.0038%
Lime (CaO)	0.1000%
Iron and alumina	3.3470%

No. 90—Osceola County Government Station Muck.

Moisture at 100° C.....	0.0000%
Nitrogen	2.4400%
Insoluble matter (sand)	7.9700%
Phosphoric acid (P_2O_5)	0.1600%
Potash (K_2O)	0.0800%
Lime (CaO)	Trace
Iron and alumina	0.8000%

No. 91—Osceola County Government Station Muck.

Moisture at 100° C.....	0.0000%
Nitrogen	1.7000%
Insoluble matter (sand)	33.3900%
Phosphoric acid (P_2O_5)	Trace
Potash (K_2O)	0.0600%
Lime (CaO)	Trace
Iron and alumina	2.4210%

No. 92—Osceola County Government Station Muck, sub-soil.

Moisture at 100° C.....	0.0000%
Nitrogen	0.3100%
Insoluble matter (sand)	84.9100%
Phosphoric acid (P_2O_5).....	Trace
Potash (K_2O)	0.0700%
Lime (CaO)	Trace
Iron and alumina	2.2890%

No. 93—Osceola County Government Station Muck.

Moisture at 100° C.....	0.0000%
Nitrogen	2.7400%
Insoluble matter (sand)	7.3900%
Phosphoric acid (P_2O_5)	Trace

Potash (K_2O)	0.0900%
Lime (CaO)	Trace
Iron and alumina.....	1.7600%

No. 94—Osceola County Government Station Muck.

Moisture at $100^{\circ}C$	0.0000%
Nitrogen	3.0000%
Insoluble matter (sand)	2.2500%
Phosphoric acid (P_2O_5)	Trace
Potash (K_2O)	0.0400%
Lime (CaO)	Trace
Iron and alumina	1.2600%

No. 95—Osceola County Government Station Muck.

Moisture at $100^{\circ}C$	0.0000%
Nitrogen	2.7600%
Insoluble matter (sand)	2.1300%
Phosphoric acid (P_2O_5)	Trace
Potash (K_2O)	0.1000%
Lime (CaO)	Trace
Iron and alumina	1.3900%

No. 96—Osceola County Government Station Muck, sub-soil.

Moisture at $100^{\circ}C$	0.0000%
Nitrogen	1.0100%
Insoluble matter (sand)	65.8600%
Phosphoric acid (P_2O_5)	Trace
Potash (K_2O)	0.0300%
Lime (CaO)	Trace
Iron and alumina	1.3000%

No. 97—Osceola County St. Cloud Orchard Muck, sandy ridge.

Moisture at $100^{\circ}C$	0.0000%
Nitrogen	1.5000%
Insoluble matter (sand)	53.5900%
Phosphoric acid (P_2O_5)	Trace

Potash (K_2O)	0.1500%
Lime (CaO)	Trace
Iron and alumina	10.0100%

No. 98—Osceola County Sugar Cane Muck Land, sandy ridge.

Moisture at $100^{\circ} C$	0.0000%
Nitrogen	1.3900%
Insoluble matter (sand)	50.3800%
Phosphoric acid (P_2O_5)	Trace
Potash (K_2O)	0.5100%
Lime (CaO)	Trace
Iron and alumina	12.6900%

No. 35—Polk County Bay Muck.

Moisture at $100^{\circ} C$	14.7050%
Nitrogen	2.4500%
Insoluble matter (sand).....	3.2750%
Phosphoric acid (P_2O_5).....	0.0544%
Potash (K_2O)	0.0482%
Lime (CaO)	3.4600%
Iron and alumina.....	0.5106%

R—Orange County Reclaimed Apopka Saw Grass Muck.

Moisture at $100^{\circ} C$.....	.....
Nitrogen	2.8000%
Insoluble matter (sand).....	4.2000%
Phosphoric acid (P_2O_5).....	0.2100%
Potash (K_2O)	0.0780%
Lime (CaO)	2.0920%
Iron and alumina.....	1.6500%

S—Orange County Reclaimed Apopka Saw Grass Muck.

Moisture at $100^{\circ} C$.....	.....
Nitrogen	2.8500%
Insoluble matter (sand).....	4.5500%

Phosphoric acid (P_2O_5).....	0.1810%
Potash (K_2O)	0.0700%
Lime (CaO)	1.9670%
Iron and alumina.....	3.0200%

T—Orange County Average Saw Grass Muck.

Moisture at 100° C.....	.....
Nitrogen	2.2800%
Insoluble matter (sand).....	10.1500%
Phosphoric acid (P_2O_5).....	0.2800%
Potash (K_2O)	0.0600%
Lime (CaO)	1.8300%
Iron and alumina.....	5.7000%

No. 23—Lake County Bay Muck.

Moisture at 100° C.....	13.9500%
Nitrogen	1.3832%
Insoluble matter (sand).....	5.0480%
Phosphoric acid (P_2O_5).....	0.4032%
Potash (K_2O)	0.0386%
Lime (CaO)	3.1950%
Iron and alumina.....	0.6768%

No. 24—Lake County Saw Grass Muck.

Moisture at 100° C.....	12.2200%
Nitrogen	2.6460%
Insoluble matter (sand).....	4.2770%
Phosphoric acid (P_2O_5).....	0.1152%
Potash (K_2O)	0.0116%
Lime (CaO)	1.7500%
Iron and alumina.....	0.5748%

A MOST PROMISING GRASS FOR SOUTHERN FLORIDA.

UNIVERSITY OF FLORIDA
AGRICULTURAL EXPERIMENT STATION.

Elephant Grass, Napier Grass, Carter Grass.

By J. B. THOMPSON.

Napier grass, *Pennisetum purpureum*, is a native of Tropical Africa and was first introduced into the United States in 1913 by the Federal Department of Agriculture. It is a rank growing perennial grass, with non-saccharine juice, and ranges from 6 feet to 15 feet or more in height. It is quick growing and bunchy, each plant bearing many coarse stalks or canes with numerous broad succulent leaves. At the Experiment Station it has shown a habit of sending out a branch from each of the upper joints during the late-summer months; and in October each of these bears a long millet-like seed spike varying from 3 to 10 or more inches in length.

PROPAGATION AND PLANTING.

Napier grass may be propagated by either one of three methods. It may be grown from joints of the canes, from divisions of the root bunch, or from the seed. The mature canes may be cut before frost in the fall and banked over winter by the method commonly practiced in the handling of Japanese cane or sugar cane. In the Spring these seed canes may be planted horizontally in open furrows made 6 feet apart and the canes dropped from 3 to 4 feet apart in the row. Where the number of seed canes is limited and it is desired to adopt a system

that will insure the maximum number of plants from the canes available, single eye cuttings may be successfully used. These are prepared by severing the canes with a sharp slanting cut about an inch below each joint. In planting these the lower end of the cutting is simply thrust obliquely into the plowed ground to a depth of 4 or 5 inches. In preparation for planting the soil should be thoroughly harrowed to eliminate air spaces and prevent the cuttings from drying out too rapidly. If, however, the canes are sufficiently mature, and the soil is in good condition both roots and sprouts will be sent out from the same joint and a good vigorous plant will soon be established. The root clump may also be divided into several parts, each of which is capable of producing an independent plant. Napier grass seeds freely in the latitude of Gainesville and has produced mature seed as early as the last week in October. Many of these seeds are found to germinate; and the practice of propagating plants by this method would seem entirely practicable, at least while seed canes are not available in quantities adequate to entirely supply the demand for them. The seed should be sown in seed flats or boxes and the seedlings may be planted to the field when about 6 inches high. Plantings should be made in rows 6 feet apart with spaces of from 3 to 4 feet between plants in the row. On highly fertile soil these distances should be increased.

SOIL AND CULTURAL REQUIREMENTS.

With respect to soil requirements this grass does not seem as exacting as are many of our more familiar forage plants. It thrives remarkably well on good muck or other rich moist soil. It also does comparatively well on the lighter drier soils having average fertility. There is an impression rife among interested parties that this grass will produce large crops on any type of soil and that it requires little or no care. This belief is unfounded.

Plantings made in many parts of Florida during the past year indicate that results will vary according to the fertility of the soil, and that at least as much care and cultivation will be required as is necessary to produce a good crop of Japanese cane. It is a drouth resistant grass, but will thrive best where soil moisture is not lacking. It seems especially able to appropriate plant food from comparatively poor soil, but it can not continue indefinitely to produce heavy crops on a light soil without some provision for returning the plant food removed.

YIELDS, USE AND FEEDING VALUE.

There are, as yet, little data on the yields of this grass in Florida, but there seems little doubt that where conditions are favorable, there is no other forage crop that will excel it in the production of green feed. One test made at the Experiment Station yielded at the rate of 19.5 tons to the acre, while another planted at a different time and under different conditions gave a crop weighing at the rate of 39.1 tons of green feed to an acre of land. These results were obtained from new pinewood land of rather better than average fertility but with no fertilizer. Two tests made under government auspices in New South Wales resulted in yields of 16 and 25 tons of green fodder respectively after a period of four months from time of planting. Napier grass is a splendid crop for soiling purposes, as it ratoons freely, is palatable as a green fodder, and very nutritious. Fats, 2.15%; protein, 11.36%; sugar and starch, 46.02%.

An official analysis made by the Government Chemist of New South Wales and reported in the Agricultural Gazette of New South Wales, for July 1917, shows this grass to be unusually high in food nutrients, containing in the green form 3.59 percent protein, and constituting

a good balanced ration for a cow when yielding a good flow of milk. Like other green roughage, a full ration would not, of course, contain enough dry matter as a complete feed for fattening or forcing milk production, and some concentrates would be required to produce best results.

CITRUS CANCER ERADICATION IN FLORIDA.

By WILMON NEWELL, PLANT COMMISSIONER,
GAINESVILLE, FLA.

The work of eradicating citrus canker in Florida, which has been carried on intensively by the State Plant Board and the Bureau of Plant Industry, U. S. Department of Agriculture, for the past three years and eight months, has been an undertaking unique in many ways. The disease, first noticed in 1913 and assuming an alarming aspect in 1914, had hitherto been unknown, and for a disease so deadly and destructive to appear like lightning from a clear sky was undreamed of. In 1914 its destructive nature became so apparent in Dade County that every possible means of checking it by sprays or other treatments were tried, but without effect, and it was soon learned that the spread of the disease could be checked only by the complete and prompt destruction of all infected trees, as well as the adoption of antiseptic measures more severe than those practiced by surgeons in their operating rooms!

The fight against citrus canker in Dade County during 1914 was waged by the growers themselves and by the Florida Growers' and Shippers' League, no State or Federal assistance being available, except a thousand dollars from the Governor's contingent fund and about the same amount from the State Nursery Inspector's Office. In spite of all that could be done by these agencies, the plague continued to spread, and efforts to secure State aid resulted in the passage of the Florida Plant Act in the Spring of 1915, and the appropriation by the State Legislature of a fund of \$125,000 with which to conduct the fight against the disease. Just prior to this time the Department of Agriculture, through Dr. K. F. Kellerman, Associate Chief of the Bureau of Plant Industry,

took a hand, mainly with a view to finding out whether measures of eradication appeared to be feasible.

To make a long story short, the Plant Board took up an intensive campaign against the disease, assisted both financially and technically by the Department of Agriculture, and the campaign has been continued unremittingly up to the present time.

Never before was eradication of a plant disease undertaken upon so tremendous a scale, and never before were such large amounts of money expended for such a purpose. However, the results have more than justified the expenditure and the effort, for it is a certainty that the round orange and grapefruit industries of the State would have, within a few years, been ruined entirely by the disease if allowed to have its own way.

Up to June 30, 1918, a total of \$1,002,944.65 had been expended on the canker eradication work in Florida. Of this amount \$247,030.27 was money appropriated by the State Legislature, \$648,009.57 was out of Federal appropriations expended through the Department of Agriculture, and \$107,904.81 was expended by the Florida Growers' and Shippers' League, by County Commissioners, by growers and by Plant Board employees.

Staggering as the expenditure appears, its justification is found in the fact that this expenditure has saved from practical destruction the State's principle industry, representing an investment of \$140,000,000 and bringing into the State each year approximately \$22,000,000 in cash.

However, the expenditure of money alone could never have accomplished the task. The utmost care and thoroughness on the part of every employee of the Plant Board was also necessary. This, fortunately, was secured and the success thus far attained would not have been possible had not the Board from the beginning eliminated all political considerations. No person has ever held employment under the Board on account of political influence or personal favoritism. On the contrary, effi-

ciency has been the sole basis upon which an employee could hold his position and the policy of the Board to promote men in strict accord with their ability and attention to duty has resulted in an organization loyal to the public of Florida and wonderfully efficient. Many evidences of this loyalty have come to light. On two occasions, when funds were totally exhausted, all employees continued their work without compensation, even defraying their own expenses, in order that there might be no set-back to the work. Inspectors have worked day after day knee-deep in water, inspecting trees suspicioned of being infected. In case of newly discovered outbreaks the men traveled all night and on Sundays to reach the infection and wipe it out in the quickest possible time and in other cases men have worked in infected groves until prostrated by heat or fatigue. The battle against canker has been a wonderful one, even if not spectacular, and it has by no means been without patriotic sacrifices on the part of those engaged in it.

Co-operation of the citrus growers themselves was also vital and this co-operation the Plant Board has enjoyed to an unusual degree. Of course, in the beginning of the work there were many who did not credit the statements as to the destructiveness of the disease and it was perhaps only natural that they should object to the drastic measures taken. However, with a fuller realization of what failure in this undertaking would mean to the citrus industry, and, in a broader sense, to the entire State, opposition gradually died away and it may be said that co-operation of the growers with the Board is at the present time "100 per cent. perfect."

Statistics are usually uninteresting, but in the present case they show as nothing else can, the magnitude of this work and the progress that has been made.

Citrus canker has been found, at one time or another during the past four years, in 480 citrus properties in Florida. These properties contained approximately 2 per

cent of the citrus grove acreage in the State. Today there are but five of these properties which are still classed as "infested." This does not mean that the work of canker eradication is completed, for every vestige of the disease, in fact every individual citrus canker bacterium in the entire State, must be wiped out of existence. Like a fire, the disease can again break forth and spread devastation from a very tiny beginning. Unless the work be carried to its logical conclusion and be made complete, the enormous expenditures of the past will be wasted. Properties now infected, and those which have been infected, must be kept under close inspection for from three to four years longer as a safeguard. Much of the citrus area still remains to be inspected for the first time, and until all of it has been inspected at least once we cannot be sure but what there is a center of infection in some remote locality.

The total number of grove trees which have been found infected to date amount to 13,723, and the number of nursery trees infected amounted to 342,254. The extent to which the owners of citrus trees co-operated with the board in efforts to wipe out the disease is shown by the fact that owners have given their consent for destruction, without any compensation whatever, of 234,544 grove trees and 2,611,514 nursery trees, which had been exposed to the infection.

One must not draw the conclusion that with the completion of the eradication work in all infected Florida properties now known the task will be over with. There is, potentially, almost as much danger now of citrus canker being introduced into Florida as there was in 1913 and 1914. There is a considerable amount of the disease in other Gulf States, and practically every citrus-producing country of importance on the face of the earth now has the disease to contend with. Only the quarantine work of the Plant Board stands between the Florida citrus grower and additional introductions of citrus can-

ker. This quarantine work is made just as thorough as scientific skill, hard work and available funds permit, but from the nature of the case it is not infallible. Future protection of Florida against this scourge must, therefore, depend not only upon quarantine measures, but on inspection work within the State, which will detect infections in their incipency and at the same time make it impossible for the disease to be distributed from any nursery. Inspection of the Florida nurseries, containing as they do upwards of 13,000,000 citrus trees at all times, is no small task in itself. All of these trees are inspected, practically a tree at a time, by the Nursery Inspection Department of the Plant Board, not once, but many times between the planting of the seeds and the time when the tree is ready to leave the nursery. Incidentally, the Plant Board feels a justifiable pride in the fact that since it commenced its work not a single instance has come to light of citrus canker being distributed on nursery stock.

In other words, while the board has, through one department, been eradicating the citrus canker that was in Florida when the board commenced its work, its Quarantine Department has been keeping out more of the disease, and its Nursery Inspection Department has been holding the second line of defense to see that nurseries did not become infected, either from extra or intra-state sources, and spread the disease. This combination must continue perpetually, and is the price of the future safety of Florida's citrus industry, even though the expense of future protection will doubtless be much smaller than the cost of the war on canker through which we have been passing, and which, it is confidently hoped, will soon be ended, not by an "armistice," but by complete annihilation of the enemy within our borders.

Gainesville, Fla., Dec. 14, 1918.

THE CITRUS FRUIT INDUSTRY.

A Review of Citrus Activities in Florida During the Two Years Ending December 31, 1918.

By DR. J. H. ROSS, *President Florida Citrus Exchange, the Second Largest Farmers' Co-operative Organization in the United States.*

The stability of the citrus fruit industry of Florida has perhaps been best shown within the last two years. Its ability to withstand seriously adverse circumstances and to recuperate has been well demonstrated.

With the beginning of the 1916-1917 season citrus growers had an excellent outlook in point of both crops and prices. Early fruit went forward, and was readily absorbed by the markets at good prices. After the opening of the year 1917 conditions during the month of January were generally very satisfactory to growers.

Then unheralded there came on February 3, 1917, the coldest weather for twenty-five years. Snow was seen in certain portions of the north central part of the State for the first time within the memory of many inhabitants there, and a killing freeze caught practically all of the fruit then hanging upon the trees, while untold damage was done to thousands upon thousands of acres of valuable grove properties.

It was largely a repetition of the big freeze of the season of 1894-95; but the results was signally different insofar as to the effect upon the growers themselves. While in 1894-95 hundreds of growers abandoned their properties, there was apparently no disposition to do this in 1917. Instead practically all those whose groves were affected forthwith applied themselves strongly to the task of bringing their properties back into condition.

Horticultural experts of the State gave sound advice as to the best methods to be followed in rehabilitating

stricken trees. The information they gave was given widest circulation by the newspapers and periodicals of the State. This information undoubtedly was of the greatest value to grove owners.

Everywhere there was a disposition to "stick to the ship;" and the results of this determination and a proper application of the efforts of the growers is now strongly manifest.

Volusia County provides an excellent example of this. In this county the damage to trees was most severe. As a result the crop available for marketing from there during the 1917-1918 season was very small; but we now have the example of Volusia County having for shipment during the 1918-1919 season considerably more than six times the volume of fruit shipped during previous season. Moreover, prospects are reported excellent for a considerable increase over these figures next season.

As a result of the previous winter's freeze the crop of the 1917-1918 season was considerably below normal amounting only to approximately 5,000,000 boxes, not all of which was of the most desirable quality. Prices generally are good during a short-crop season and this was true during the 1917-18 season, but the unprecedentedly severe weather prevailing throughout the North while most of the fruit was moving, the transportation tie-ups and other handicaps due to war conditions all combined to present considerable difficulties in the matter of marketing.

However, to those growers who had any considerable volume of fruit for handling, the season was most successful in point of prices realized. The Florida Citrus Exchange was able to secure for its members the highest average of prices on both oranges and grapefruit in the history of the citrus fruit industry in Florida.

The opening of the 1918-1919 shipping season was notable for the very early maturity of both oranges and grapefruit. Due to rather unusual weather conditions fruit

generally was from three to four weeks earlier in maturing than is normally expected. The epidemic of sickness throughout the North proved a strong stimulus to the markets as a result of which both oranges and grapefruit went forward in unprecedented volume right on up to the close of the year 1918, at which time this is written.

Notwithstanding a certain amount of trouble due to decay, caused by some softness in fruit and delays in transportation, most excellent prices were realized for growers. This is particularly true when the tremendous volume of fruit moving out of the State during November and December, 1918, is taken into consideration.

Before the opening of the season the best available estimates placed the 1918-1919 total crop in the neighborhood of 8,000,000 boxes. The severe storm which ravaged Pinellas County caused the loss of something like 300,000 boxes of fruit in that section. This combined with the effects of a certain amount of droppage generally over the citrus section of the State has reduced the total crop quite considerably. Careful estimates from well posted persons at the close of 1918, placed the total crop for the 1918-19 season at from 7,200,000 to 7,400,000 boxes. According to government figures, 10,620 carloads of citrus fruit moved out of the State up to and including December 27, 1918. Figured upon a basis of 360 boxes to the car this would mean a total of 3,823,200 boxes which had gone forward to that date. At the rate fruit was then moving it is safe to figure an additional 350,000 boxes for the remaining days of that month; which would mean that approximately 60% of the estimated crop of the State had been shipped before the close of the year 1918. The government figures earlier mentioned gave a total of 7,887 carloads of oranges as against 4,153 for the corresponding period of the year previous. Shipments of grapefruit were given at 2,733 cars, as against 1,318 cars of the season before at the same time.

Under the stimulus of careful advertising and the selling efforts of the more than one hundred northern representatives of the Florida Citrus Exchange the Sealdsweet brand of this great growers, cooperative, non-profit marketing organization has become a very strong factor in the successful marketing of the members of this organization. Purposeful following out of carefully laid advertising and sales plans have resulted in Sealdsweet oranges and grapefruit obtaining a place very high in the regard of both wholesale and retail fruit dealers in the North, while millions of northern housewives have been taught to demand Sealdsweet fruit through the newspaper and magazine advertising of the Florida Citrus Exchange. This in very large part accounts for fruit shipped under the Sealdsweet brand generally obtaining higher prices in the northern markets than is realized for other fruit not so distinguished.

This advertising and concerted selling effort is made possible only through the standardized methods of picking, packing and handling fruit in the packing houses of the various associations of the Florida Citrus Exchange throughout the citrus section of Florida. Unified control of the methods followed by these packing houses makes it generally possible to deliver on the markets fruit of uniform grade and pack.

The close following of uniform packing methods is one of the big advantages had through the operation of the centralized and thoroughly equipped packing houses of the Florida Citrus Exchange. Aside from the economics affected, this has proven one of the greatest advantages to those growers who are members of this organization.

One of the significant developments in connection with the citrus fruit industry of Florida within the last two years has been the entry of a new factor into the situation in the form of the Exchange Supply Company, which is affiliated with the Florida Citrus Exchange. The Exchange Supply Company is closely patterned after the

Fruit Growers' Supply Company of California, which is an affiliation of the California Fruit Growers' Exchange.

It has for its purpose the purchase of necessary material and supplies for growers in large quantities and the sale of them at cost to its stockholders.

The various associations of the Florida Citrus Exchange are stockholders of the Exchange Supply Company. The grower members of these associations place their orders for materials with their local organization. The Exchange Supply Company bills all materials directly to the associations, which in turn collect from the growers for the materials furnished to them. Materials furnished to the packing houses are paid for from association funds.

The Exchange Supply Company charges supplies to its members at prevailing retail prices. In this way it does not disturb the normal retail markets, but, due to the company being owned by those who make their purchases through it, all the profits from its sales are returned to purchasers in the form of rebates and dividends.

One of the surest ways to make money is to save money, and the citrus growers who are enabled to obtain their various supplies at lowest possible cost through the medium of the Exchange Supply Company, and who, in turn, are able to obtain for their fruit its full value in the Northern markets by having it handled through the co-operative, non-profit selling organization of the Florida Citrus Exchange, very naturally must obtain a larger compensation for their activities and efforts than can any growers who have not the benefit of affiliation with these organizations.

The beneficial effects of co-operative marketing of their products by growers have been thoroughly established in Florida through the greatly higher average prices obtained for Florida citrus fruits in the Northern markets since the Florida Citrus Exchange became an established factor in the marketing activities of this State. These

marketing activities have been realized in the face of constantly increasing production, which makes them all the more notable.

The commercial value of co-operative marketing is firmly established in Florida. The developments of the last two seasons have only served to emphasize that value. In view of this, and in view of the stability of the citrus fruit industry as shown in the face of most adverse conditions, it is safe to say that the outlook for the citrus industry in Florida seemingly never was brighter than at the close of the year 1918 when this review is written.

MILCH GOATS.

By H. S. ELLIOT, Chief Clerk, Department of Agriculture.

For several months this Department has received many inquiries relative to this subject and the probable success of such an industry in Florida.

On investigation by this Department we find this is a very limited industry, the territory covered in its operation probably not exceeding half a dozen States in number, excepting Florida, where the number of goats used for supplying milk to human beings does not exceed fifty at this time.

The industry is operated to some extent in New York, Virginia, New Mexico, Arizona, and in California, to a considerable extent in the latter, and where it probably meet with more success than in any other section of the United States. We believe there can be no reasonable grounds, for doubting its adaptibility to and entire success in Florida, and especially when confined to the hilly and rolling lands of the State without regard to section.

With the present economic condition and the extraordinary high cost of living, the use of the milch goat is one sure means of reducing living expenses on the part of small families and at the same time placing one of the most nutritious and wholesome foods within their daily control at the minimum of cost. It is our deliberate opinion that it is an industry both capable and worthy of the highest development.

GENERAL INFORMATION CONCERNING MILCH GOATS.

Milch goats are kept for milk production in many foreign countries, especially in Continental Europe, Great Britain, Scandinavia, and in the countries bordering the Mediterranean. They are found in limited numbers in different States in the Union, and are doubtless more numerous in California than elsewhere in the United States.

They are generally kept in very small herds that supply the milk used by the family. A relatively small number of large herds is found in California, some in Alabama, and some in Virginia.

The comparatively dry climate of the Southwest agrees well with milch goats, and they are kept on land differing greatly in topography and feed conditions. If sufficient feed is available, hilly and even rocky land can be used for keeping goats. Goats do not thrive well on low, damp, or swampy land as the conditions on such land are conducive to foot rot and other troubles. Provided they are properly cared for, goats will do well on well-drained valley land.

Alfalfa in the Southwest furnishes an abundant feed supply in the interior valleys, which could be utilized in goat keepplug as at the present time for dairy cattle and other classes of live stock. In most places, where alfalfa cannot be grown successfully, other pasture crops well adapted for feeding goats can be raised to advantage, such as clover, vetch, rape, and peas, cow peas, velvet beans, etc., such as is found growing in waste places, on vacant city lots, along roadways and fences, on hill lands where there is not sufficient available feed for keeping a cow. Goats thus largely derive their living from feed that would otherwise go to waste, which accounts for their popularity among people in urban communities and for the fact that they are generally considered most economical milk producers. The present conditions, care and possible extension of the milch goat industry in this State will be discussed further on in this bulletin.

BREEDS OF MILCH GOATS.

There are many different breeds of milch goats, but comparatively few of these are represented in California, or other States, those present in largest numbers being the Toggenburg, Saanen, and Anglo-Nubian. A great variety of crosses and numerous goats of no particular breeding are also found.

Toggenburg.—This breed has its native home in Toggenburg Valley, Switzerland, where it has been bred for centuries. The prevailing color is brown, both light and dark, with white markings. A white hindle mark is always present on each side of the face. White is also present on the under line and on the legs below the knees and hocks. White is also now and then found on the sides of the animals. As a rule, they are hornless, but horns are some times developed. The head is rather long, facial lines straight or slightly concave, ears of a medium size, more or less erect, although sometimes held almost horizontally. The neck is somewhat longer and slender and there may or may not be wattles at the base of the lower jaw. Toggenburgs usually have a beard, which on the male is long and heavy; the better specimens of the breed are always lean and of medium size, females weighing about 100 to 140 pounds, while bucks as a rule weigh from 110 to 140 pounds. Both long-haired and short-haired animals are often seen in the same herd. It has been our experience that the Toggenburgs are very hardy and make splendid mothers.

Saanen.—This is another Swiss breed which is quite similar to the Toggenburg in general conformation. They are a little heavier in weight, mature bucks weighing from 175 to 200 pounds and does from 110 to 140 pounds. They are of a white or cream color, and usually short-haired. The Saanen is considered a hornless breed, but horns often occur as in the case of the Toggenburg. The Saanen may be used to great advantage in grading up herds, as many of the common goats are white in color.

Nubians or Anglo-Nubians.—This goat is probably the result of a cross between the common short-haired goat of England and the Nubian, Egyptian, Abyssinian, Chitral, or some other Oriental breed of goats. They have a short coat of no fixed color, all colors and combinations being found. The ears are long, wide and pendant or semi-pendant. The facial lines are arched with a slight taper

toward the muzzle. The eyes are large and full, and the forehead wide. The kids are relatively large and grow rapidly.

THE MILK OF THE GOAT.

One of the first questions usually asked about milch goats is in regard to the quantity and quality of milk produced. Milch goats are similar to dairy cows in that some do not yield a sufficient quantity to pay for their keep, while others are profitable dairy animals. A good goat should give 800 to 1,000 pounds (approximately 400-500 quarts) during a lactation period. Many breeders speak of the production of their animals in rather uncertain terms, such as a four-quart doe, a three-quart doe, etc. This refers to the production for a single day during the maximum flow of milk. The individuality of the animal is the greatest factor influencing milk production. Breed is also an important factor. The Toggenburg and Saanen are, as a rule, heavy milkers. While but little is definitely known in regard to the production of the other breeds at the present time, Pelger states that the Anglo-Nubian is a good milker of rich milk, containing more butter-fat than that of Swiss goats, although the yield is, not as a rule, as large.

COMPOSITION OF GOATS' MILK.

The composition of goats' milk varies as that of cows' milk, with the breed, period of lactation, and the individuality of the animal. But little information is at hand concerning the composition of the milk of goats of different breeds. So far as known, the milk of the breeds of Swiss origin does not contain as high a per cent of butter-fat as that from the Anglo-Nubian or even from some of the common goats. As the doe advances in her period of lactation the fat content of the milk increases. This also

varies with other conditions, like intervals between milkings, completeness of milking, etc., so that the test of a single sample of milk will not give a reliable index to the average quantity of the milk. This can only be obtained by the regular testing of the milk for one or more full days at intervals during the lactation period, in the same way as for dairy cows. A few analyses of goats' milk taken from different sources are given below:

**COMPOSITION OF GOATS' MILK (GENEVA, N. Y.,
AGRICULTURAL EXPERIMENT STATION.)**

Analyses were made of twenty-three samples of milk from eleven animals:

	Average per cent.	Variations Per cent.
Fat	3.82.....	1.80- 8.40
Total solids	12.12.....	40- 80
Total Proteins	3.21.....	9.22-17.63
Casein	2.40.....	2.24- 5.21
Ash .....	.55	
Specific gravity, 1,0294.		

**COMPOSITION OF GOATS' MILK (CALIFORNIA
AGRICULTURAL EXPERIMENT STATION.)**

Analyses of the milk from the does in the University herd are made weekly. The averages given below are the results of the analyses made weekly during the entire lactation periods. With one exception these does are Toggenhurgs:

	Average per cent.	Variations per cent.
Water	88.05.....	91.5-85.2
Total solids	11.95.....	9.5-14.8
Fat	3.40.....	1.7- 5.6
Solids, not fat.....	8.55.....	7.8- 9.2

OTHER SOURCES GIVE THE COMPOSITION OF GOATS' MILK AS FOLLOWS:

Authority.	Water per cent.	Fat per cent.	Casein and albumen per cent.	Sugar per cent.	Ash per cent.
Renessé	85.50	4.80	5.00	4.00	.70
Landweinth ...	85.60	4.60	4.80	4.30	.....
Hoffman	86.91	4.73	3.68	4.50	.90
Koenig	86.88	*4.70	3.76	4.64	.85

*Variations, 2.29-7.55 per cent (Compiled from about 100 analyses).

FLAVOR AND ODOR OF GOATS' MILK.

Many people believe that all goats milk has a peculiar "goaty" odor or taste. This is not, however, necessarily the case. A disagreeable flavor is often times due to the presence of a buck in the milking herd; it may also come from the feeding of improper feed. Provided good feed and care are given the doe, and the milk is produced under sanitary conditions, no disagreeable odor or flavor is found in goats milk, although it has a distinct flavor, different from that of cows milk.

Length of Lactation Period.—Some of the common goats milk for only four or five months; on the other hand it is not easy to "dry-up" many well-bred does even after they have been milking for ten months. The common goat herd may be improved, however, by the use of pure bred bucks of known milking strains. A good milch goat should give milk for at least eight months.

USE OF GOATS' MILK.

Direct Consumption.—Goats' milk is a common article of diet throughout Europe. Foreign writers agree in attesting to the value of goats milk for invalids and children. Physicians give testimony as to the beneficial use of goats' milk for infant feeding.

The following quotation from the annual report of the Geneva, N. Y., Agricultural Experiment Station for 1915 is of interest in this connection:

"During the past few years the station has maintained a herd of milch goats for the purpose of studying, not only the cost of maintenance, but also the adaptability of the milk to certain uses. The most striking results so far secured relate to feeding goats' milk to infants. The station has had the opportunity to supply this milk to a fairly large number of very young children who were in serious physical condition, due to their inability to properly digest and assimilate modified cows' milk or any of the commercial infants' foods that were tried. In nearly all cases of this kind, the physical condition of the children has been built up, and satisfactory growth has been brought about by the use of goats' milk. It is not entirely clear why this milk has proven to be so efficient a food in the instances under observation.²

²New York (Geneva) Agri. Exp. Sta., Bull. 413, p. 639."

CARE OF MILCH GOATS.

The quantity and quality of milk which a goat will give depends very largely on the animal herself.

A good scrub, or common garden goat may give as much as $1\frac{1}{2}$ or 2 quarts a day for two months, but if her milking qualities are not developed, she soon goes dry.

A grade—i. e., the product of a pure bred or cross bred sire and a scrub dam will produce more milk than her dam and the quality will depend largely on her sire.

A cross—i. e., the product of two specimens of different pure breeds will give a fine quantity of milk and it will vary in quality according to the herds of sire and dam.

The Swiss goats are the Holsteins of the goat family, giving an enormous quantity of rather poor milk, the amount of milk being as much as $6\frac{1}{2}$ quarts in exceptionally good animals. The butter fat would not be higher

than 3.5 per cent. Of course individuals vary—some more, some less.

The Nubian goat and the Indian goat are the Jerseys of the goat family. The Nubian will produce $4\frac{1}{2}$ quarts of milk which will test 8 per cent or 9 per cent butter fat. Note carefully the distinction that is made all through this article between grades and crosses.

The young does should be kept growing all the time, and should never be bred until fifteen months of age at least. The period of gestation is from 147 to 152 days and the dams stand a great deal of rough usage without accident. Two kids are generally born at a time, but we have known goats to have three, four, and sometimes five young at a birth. The kids should be allowed to take the colostrum, or first secretion of the glands, which is yellowish and thick, and of a mucilaginous nature. It seems to act as a laxative and tones up the systems of the young.

The udder should be very carefully watched, and if it becomes inflamed and over-distended it should be very carefully washed with warm water with a few drops of turpentine in it, and then carefully massaged with olive oil. Then a part of the contents of the udder should be drawn—sometimes even before the kids are born.

If the kids are pure bred or cross bred they may all be kept for stock, as there is a great demand for young animals. If they are grades, the males may be killed at birth or else emasculated, and at from six months to a year they make most excellent meat, resembling mutton, if fed on pasture, and venison, if fed in the woods.

The females should be bred to pure or cross bred bucks. It is good to breed back one generation to its own sire to fix the type. A grade should never be allowed to be the sire of any kids. Never keep one.

There is a general impression that goats are omniverous, eating any and everything to which they may gain access. This is a great mistake. Under proper conditions, the goat is the most fastidious of all our domestic ani-

imals, and refuses to drink any but pure, fresh water, and scorns sloppy, sour or greasy food. Indeed the greatest trouble in goat feeding is to prevent waste in stall feeding, for if once any of the food is dropped under foot, it is never touched.

When it is available the best results are obtained from free grazing on land which has been deforested, but not yet reduced to good pasture, as the animals are browsers rather than grazers, and relish a very diversified diet.

It is best to have the land well fenced, and a good fence consists of woven wire twenty-six inches high, with a strand of barbed wire three inches above it, and another strand six or eight inches above that. The tendency of a goat is rather to squeeze through or crawl under than jump over an obstacle.

The goat should be exceedingly valuable to persons dwelling in an arid or semi-arid country, for she will not only make a living, but thrive, and supply a generous quantity of delicious milk and wholesome, palatable meat, where the cow would perish from starvation. Of course, on such land a goat should have free range.

Easily handled, readily finding her own food, and transported with but little trouble, the goat makes a fine foster mother for infants, and has been used to raise lambs, calves, and by the irony of fate, one was foster mother to a lion cub in the Zoological Gardens in Paris.

It is surprising how small a quantity of water will suffice for a goat, and she must be frequently encouraged to drink.

The Angora produces mohair, and is largely used as a means of destroying brush and shrubbery on newly-cleaned land, but is not a milch goat.

The garden refuse, clean and fresh, with scraps from the kitchen, supplemented with some sweet hay and a little grain, will be ample to feed these animals. Their kids, if pure bred or cross bred, will bring enough to pay for all the bought feed for a year.

A first-class milch goat, pure bred or cross bred, giving a gallon of milk a day when fresh, will readily bring \$50.00 to \$100.00 or more. But even at that apparently high price they are exceedingly scarce, and for every doe kid a breeder has sold, he has had not less than fifty chances to sell the same kid. Following are the names and addresses of a number of milch goat breeders in the several States:

D. R. Schmidt, Hannibal, Mo.—Anglo-Nubians, Toggenburgs, and grades.

Esther Tufts, Meredith, N. H.—Saanen and Toggenburgs.

Edwin W. Pritchett, Rt. 1, Long Beach, California—Swiss Toggenburgs.

Will L. Tewalt, Richey, Miss.—Pure Toggenburgs.

Victor D. Hondt, Spankle, Washington.

Fred C. Lounsbury, Plainfield, N. J.—Anglo-Nubian and Toggenburg grades.

G. T. Etzel, 293 Ocean Parkway, Brooklyn, N. Y.

Miss H. A. Wood, Swiss Goat Dairy, Pasadena, California—Purebred Swiss Toggenburgs.

FLORIDA BREEDERS.

Eppie L. Barber, Lake Worth.

William B. McCain, Clement.

Capt. Hugh L. Willoughby, Port Sewell.

Bennett Land, Jr., Plant City.

Oakland Hill Goat Ranch, Lake Geneva.

The Walkill Stock Farm Co., Green Cove Springs, Fla.

ANGORA GOATS AND SHEEP IN FLORIDA WHY NOT BOTH?

By H. S. ELLIOT, Chief Clerk Department of Agriculture.

In the interest of sheep meat of the highest quality we suggest the growing of Angora Goats in Florida, as well as sheep. We offer some suggestions to those interested, which we hope will induce the growing of Angoras on a much larger scale in Florida than heretofore. But before deciding upon which is the more profitable for the farmer it will be necessary to look into the habits of both. The habits of sheep are so well known that it would seem to mention them is a waste of ink, but in order to make a comparison it is necessary to do so. Goats and sheep belong to two different classes of animals. The sheep are grazers, eat grass; the goats are browsers, eat the twigs and shrubs. Sheep love to nip the short and tender grass close to the ground. Goats prefer the leaves and twigs of shrubs and want to feed with head up and hate to lower the head to get a bite. The goat prefers to eat the top off everything he comes across, weeds brush, briars, etc. How often do we see spots in the sheep pasture where the sheep have eaten the grass to the roots and left other places where the grass had grown up and covered the ground with fine grass, because they had gotten this one spot eaten down until it is very short and tender they kept it there (because it is tender) until it is so poor it will hardly produce grass at all. Goats eat the coarser foliage in their pasture such as brush, briars and weeds, and leave the grass for the other stock until the former is all consumed. No other stock will feed after sheep, but they do not object to eating after goats. Turn a flock of sheep into a wheat stubble sown to grass badly grown up with weeds, etc., and the sheep will make paths through the weeds and eat up the young grass and probably kill it. Turn

goats into the same field and they will eat off the weeds and leave the grass to grow. Wild carrots, daisies, cockleburrs, thistle, and such weeds have no terror for the man who keeps goats, as they make good grazing in Summer, and if cut before they bloom good hay for Winter.

Fencing:

Goats are not hard to fence if they have never been in any inclosure except a corral, and hence do not know how to jump. Any good fence will turn them; they are more apt to crawl under than jump over. But when they do learn to jump they are good at the job. A woven wire fence three feet high is an ideal goat fence; one with square meshes is preferable, with stay wires not closer than twelve inches apart. Angora goats breed but once a year, and usually bring forth their young in late Winter or Spring, usually one, but sometimes twins. The kids are delicate when first born, but when once filled with mother's milk they stand lots of exposure. The Fall is the best season to buy goats, and then you can see the mohair, and it has not added much to the price. If you buy in the Spring you must buy the fleece as well as the goat. Shorn goats all look alike, and no one can tell a good-haired goat after it is clipped. Does are more apt to disown their kids if moved close to kidding time.

THE FLESH.

The flesh of the Angora goat is considered superior to mutton by everyone who has eaten it. It has a wild gamey flavor, and is called Angora venison by a great many in the Western markets, because it has the same flavor as venison. This is because both are browsers are not grazers, and as they both live on the same kind

of food, it is natural their flesh should have the same flavor. The flesh of goats raised on grass alone resembles mutton more than venison. All animals that are shorn for their fleece should be kept out of the rain as much as possible, and some breeders of fine sheep bring in their sheep whenever it looks like rain because sheep having such a thick coat of wool over their backs do not care for the rain and will not go to shelter. But the goat whose hair parts on the back and leaves his back to take the rain will rush pell-mell to shelter from the slightest shower and stay there until it ceases, or he is compelled to go out on account of hunger.

But about the returns from keeping these two kinds of animals. We all know that good sheep shear from 5 to 8 pounds of wool worth from 25 to 40 cents per pound at this time, and the heavier the fleece (other things being equal) the less the price, so much so that ram's fleeces that weigh as much as 15 pounds and over bring but half price. With the heavier fleece bringing the lowest price it is not much inducement for the sheepman to breed for the heavier fleeces. With the Angora goat it is just the opposite. Mohair, the fleece of the Angora goat is worth one year's growth from 75 cents to \$1.00 per pound at this time, while good long hair (12 inches and up) is worth from \$1.00 to \$6.00 per pound, according to condition. It has been grown 22 inches long in one year and to weigh 21 pounds to the fleece. Two buck fleeces grown in Montana weighed 42 pounds, and brought \$6.50 per pound, and a doe's fleece in New Mexico weighed 14 pounds and sold for \$43.00. A buck's fleece in New Mexico weighed 19 $\frac{1}{4}$ pounds and sold for \$84.00. So you see that the longer and heavier hair that you can grow the better price you can get. There is a market in New York and Boston for mohair 12 inches and over in length at \$1.00 to \$6.00 a pound. And evidence that it can be grown 12 inches and over in length is shown in the fact that no buck can be registered in South Africa that

does not show a growth of 12-inch hair in 12 months. Goat raising in the United States is in its infancy, and yet we are producing some of the finest mohair in the world. The man that will feed and breed his goats with the same care as his sheep will soon be producing a quality of hair that will top the market and he will have no briars, brush or noxious weeds on his farm. The United States Department of Animal industry is authority for the statement that 40 goat swill clear as much land as a man with a mattock and do it much better, and that there are millions of acres of land in almost every state that could be doubled in value by keeping goats on it for a few years.

Climate:

Goats have been successfully raised from Mexico to Texas, and in Asia Minor, where they originated, the climate is similar to the United States, with hot summers and cold winters, with snow and rain.

GOAT INDUSTRY.

The raising of Angora goats has more to work up to than any other animal industry, as by careful breeding and feeding one can increase the clip of his goats fully 300 per cent. And increases the price of the hair at about the same rate, and at the same time free the land of brush and weeds, so the pasture will look like a lawn.

ADAPTABILITY.

The Angora goat is as adaptable to Florida conditions, climate, etc., as our common goat, and far more profitable as the foregoing article shows. We advise our people to grow them. Their mohair is the most valuable wool in the world, their flesh is in every respect equal to mutton.

ten, and the cost of their keep is less than any other food animal in the world.

The following bulletin by the United States Department of Agriculture will be interesting:

THE ANGORA GOAT.

U. S. Department of Agriculture,
Farmers' Bulletin No. 573.

Contribution from the Bureau of Animal Industry, A.
D. Melvin, Chief, April 27, 1914.

ORIGIN AND DISTRIBUTION.

The Angora originated in the vilayet of Angora in Asia Minor. This location and South Africa are to-day the two large foreign centers of mohair production.

The Sultan of Turkey passed an edict in 1881 prohibiting the exportation of Angoras, expecting thereby to confine the industry to Asia Minor and have a monopoly upon the mohair trade.

In 1901 South Africa also passed a law for the same purpose, which is usually referred to as the Angora export-duty act. This act provided for an export duty of £100 (\$486.65) on each Angora goat exported. Since that time importations have been entirely prohibited.

It was feared for a time that prohibiting the importation of breeding stock would have a bad effect upon the industry in America, but later evidence has indicated that some of the best blood had already been brought to the United States and that deterioration apparently does not take place here, as experts say that the best American product is equal to the best grown in Turkey or South Africa.

Faith in the excellence of American Angoras has been demonstrated by other nations, as quite a number of exportations have been made from the United States. In

1894 six Angoras were exported to South Africa from California, and the next year 20 bucks followed for \$1,000 cash. Canada, Alaska, and some of the Pacific Islands also have flocks that came originally from California. Recently exportations have been made to Brazil and Argentine Republic.

The Angora was evidently bred pure in Asia Minor for many years previous to the last half century. About 50 years ago they were largely crossed upon the common Kurd goats of the district. Some authorities give their opinion to the effect that not a flock escaped the influx of Kurd blood. This has generally been considered a very harmful proceeding, and many hold that kemp in the Angora's fleece is still an outward sign of the presence of this foreign blood.

The Angora, as brought from Turkey, was considered too small for American purposes and was largely crossed upon the common goat. One eminent Angora authority has said that he doubted whether there was a pure-bred Angora in America. This statement is probably a little overdrawn, as other well-known Angora breeders claim that some flocks have been kept entirely pure, but undoubtedly crossing was at one time a very common practice. The purposes were to obtain a larger, hardier animal, and to increase the breeding stock. This has largely been accomplished, and it is the general opinion that the American Angora is better suited to local conditions and gives wider satisfaction than the original could ever have done.

4 DESCRIPTION OF THE AMERICAN ANGORA.

The Angora, as bred in the United States, is almost pure white, but occasionally a black one appears. Some profess to see in this the cropping out of impure strains of blood. Both sexes are usually horned, but polled individuals occur. The ears are either partially erect or

pendulous. The body should be built upon lines denoting a good constitution and should be symmetrical. The fleece should cover all parts of the body except the inside of the upper part of the legs; should be of fine quality, closely curled, of a high luster, and as nearly as possible free from kemp.

IMPORTANCE OF THE ANGORA.

New uses are constantly being found for the Angora. Their value in clearing up brush lands has been mentioned in the introduction, but it is worthy of more extended discussion. It is estimated that there are 3,000,000 acres of logged-off lands in the Northwest that could be profitably converted into homesteads. Already many fields in this section have been enabled to smile under bountiful harvests made possible by the repeated browsing off of the brush by the Angora. Many settlers who have developed farms in this section are loud in their praise of the Angoras and attribute their rapid progress to the use of this animal.

The following indicates a new use to which the Angora has been placed in the West:

Angora Goats to Prevent Forest Fires.—In order to keep the fire breaks on the southern California forest reserves clear of weeds, an ingenious plan has been put into operation which will save the Government thousands of dollars and incidentally provide forage for large herds of Angora goats. The plan was originated by Forest Supervisor R. H. Charlton, of Los Angeles, and provides for free grazing for a herd of 600 goats on the reserve. They were shipped into the State from Arizona and allowed to roam at will over the parts of the range where their services are required. Their help to the forest rangers is in keeping down the growth of weeds, grass and small shrubs on the strips of cleared land, known as fire breaks, which follow the ridges through the forest

and serve to check the spreading of forest fires. These fire breaks are of little value unless such growth is kept down, as the weeds and grass dry up in California Summers and would carry the flames across the clearings. The goats feed close, keeping the fire breaks bare of vegetation, and thus do the work of gangs of laborers. In this way the Government's pay roll is kept down, while the owners of the goats are provided with free grazing for their herds.

The interurban Railway Company between Seattle and Tacoma recently purchased a band of Angoras to keep their right of way clean and attractive. The above two are simply examples of a general type that may suggest local uses to which the Angora might be suitable.

It should not be thought that the West is the only part of the country where the Angora will fit in. In the Central West, many pasture fields that have "grown up" while other stock was being pastured upon them could be reclaimed and made to carry more stock by their use. In the South there are also many abandoned fields that might profitably pasture a band of Angoras. and gradually be made ready for cultivation.

While the Angora will get along upon grass and weeds it is more satisfactory to have a browse in connection with these. Browsing is the natural way for them to feed and they do not generally give the best results unless they have access to a certain amount of brush, etc. However, it should be stated that rough brush land is not suitable for growing extra long mohair, especially after the fleece is about 6 inches long.

The question as to whether goats can be pastured with other live stock can be answered in the affirmative. Their presence is in no way objectionable to cattle and sheep. In the case of the latter, a few goats are often allowed to run with the flock for the purpose of keeping the dogs away. It is doubtful whether this purpose is ac-

complished, as there are instances where the goats themselves have been killed, but it illustrates the point that the sheep and goats feed together satisfactorily.

Allowing goats to run with horses is not objectionable to the latter, but there is danger of the goats being kicked. Accordingly, this plan does not give very great satisfaction. This is even more true with jacks and young mules. Pasturing with hogs is generally impractical because of the danger of the hogs devouring the young kids.

Regarding the number of goats that can be pastured per acre, only general figures can be given. The soil length of pasture season, the climate and whether the pasture is to be permanent or the goats turned in merely to clean up the brush are some of the factors deciding this. There are sections unsuitable for cultivating purposes where it might be desirable to pasture the goats year after year. Eating off the browse too closely would kill it, hence it is desirable under these conditions to have several fields that are pastured for short periods in rotation. Even then the goats will often peel the brush and gradually destroy it.

For cleaning up brush land for other agricultural purposes from two to five goats per acre from two to four years will usually do the work. It has been asserted that the Angora can eat all kinds of poisonous plants without ill effects. They naturally feed upon a wide variety of vegetation, browsing a leaf here and another there, and the amount of the poisonous plants consumed at any one time is usually small. No bad results would be likely under these conditions. There are other records of where hungry goats have been turned in upon fields containing little else than poisonous plants and of large numbers dying because of having eaten heavily of them. This has been found true of the laurel plant especially. Green brier has also been found objectionable, but from another standpoint. This applies especially to goats with

considerable length of fleece. They become entangled among the vines and frequently die, being unable to free themselves.

VALUE AND USE OF MOHAIR.

It has often been said that the Angora works and pays for its board at the same time. The value of the fleece or mohair is considerable and is increasing. The ideal fleece should possess length, quality or fineness, luster, strength of fiber, freedom from kemp, and it should be closely curled but not kinky. Mohair is made into plush for railroad cars and upholstering furniture. It is also used for automobile tops, coat linings, dress goods, men's summer suits, braids, rugs, carriage robes, imitation furs, couch and table covers, sofa pillows, portieres, and curled false human hair. For a number of years the price of mohair varied between wide imitations, depending upon the decree of fashion, but during the past few years there has been a steady increase in price, undoubtedly caused by the more extended use of the article, and fashion no longer plays an important role in determining its value.

The weight of fleece for American Angoras ranges from 2 to 12 pounds. The average weight of fleece has been placed at $2\frac{1}{2}$ pounds for one year's growth. Shearing once a year is practiced, except in the Southwest. Here climatic conditions are such that the Angoras often shed their fleece if not clipped twice, hence they are usually shesred both in the Spring and Fall. Where the fleece is allowed to grow for 12 months the average length is about 10 inches. The total production of mohair in the United States for 1913 will probably approach 5,000,000 pounds. The best of it comes from the Northwest. In Oregon, Polk County leads and the product of this county has sold for from 42 to 55 cents per pound for the past few years. The Northwest Angora Goat Association reports an average cash production of about \$1.75 per head.

with many flocks averaging as much as \$2.25. From superior flocks of California and Oregon it is not unusual to get 15 to 20-inch staple in one year's growth. In Texas and New Mexico much mohair falls under the 6-inch standard (because of shearing twice a year), which is the shortest length generally desired. The short product is largely responsible for the lower average quality of American mohair. The Southwestern product shrinks heavier than that from other sections. This is especially true of the Arizona and New Mexico product, but some Texas hair shrinks as light as 5 per cent. California mohair often has a characteristic reddish cast.

Notwithstanding the large domestic production about 2,000,000 pound of mohair are annually imported into the United States. The imported mohair is of better quality than the average American product. If the practice of clipping twice a year could be abolished, the difference in quality would probably largely disappear, as these short fleeces reduce the average quality to a considerable extent. The shrinkage of American hair is said to average more than that imported, but some American authorities dispute this statement. The shrinkage is estimated at from 12 to 15 per cent. The shrinkage of Arizona and New Mexico mohair is largely due to dirt, etc., while that of the Oregon hair is caused by natural grease. In most cases the foreign mohair is blended with the American product and spun in this manner. The aim for future advancement in this industry should be toward increasing the average quality rather than the quantity of mohair produced. There need be no discouragement in this, as it has already been said that the best mohair of this country is equal to any produced. Another word of encouragement is spoken by competent authorities praises the marked improvement that has already taken place in American mohair, both in the matter of quality and freedom from kemp.

The best mohair comes from the kids, the young

wethers, and does. As the goat grows older the hair becomes coarser and gradually loses its luster and curling qualities. The production of extra long mohair, from 12 to 24 inches, has been the subject for considerable discussion of late. This quality of goods is used for making false hair, etc., and sells for a much higher price than the ordinary grades. A notable instance is the one of the fleece of Romeo, sweepstakes buck at the El Paso show in 1910. It weighed 18 pounds, measured $20\frac{3}{4}$ inches in length, and sold for \$115. This quality of hair could not be grown, however, under average conditions. It could not be produced upon rough brush land nor under any conditions where feed and care were not the best. In the Southwest it would be difficult to produce it, on account of climatic conditions, yet some breeders have succeeded in producing an excellent quality of fiber in this section.

As a rule, the extra long fleeces must be allowed to grow for a longer time than 12 months. Some authorities claim that certain non-shedding goats are essential for the production of the extra long fleeces; others dispute this, maintaining that care, food and climatic conditions are the deciding factors.

CARE OF FLEECE.

Mohair fleeces should not be tied, but should be rolled up, end side in, and in suitable bags. Bags that have previously been used for wool should never be used, as the wool fiber that adheres to the sides becomes mixed with the mohair. It will not take the dye used for mohair, and is the source of considerable trouble in the manufactured goods.

A great deal of American mohair is sold direct to the mills by the producer. Quite often it is pooled, and the growers of the Northwest have realized considerably better prices by this method of sale. Commission men also

handle this product. Some of the principal mills in this country are the Sanford Mills, Sanford, Me.; the Massachusetts Mohair Plush Co., Lowell, Mass.; the Queensbury Mills, Worcester, Mass., and the Multnomah Mills, Portland, Oregon.

The skin of Angoras with the hair attached are sometimes tanned for rugs and carriage robes. This material is also used for making muffs, trimming coats, etc. It makes a very attractive "fur." With the hair removed, the skins are also tanned and made into leather. This is not suitable for the production of kid gloves or shoes, but is sometimes made into morocco and similar grades, the poorer product being used for the manufacture of workmen's gloves.

ANGORA MUTTON.

The flesh of the young Angora is delicious, although there has been a prejudice against its use. Kansas City is the leading goat market in America. Two classes of goats are offered for sale, designated at "fat" and "brushers." The fat class are those in condition for slaughtering, and the "brushers," as their name would indicate, are stockers of the caprine family. The average weight of goats at Kansas City is 68 pounds.

Because of the prejudice against Angora mutton it has been almost invariably passed over the counter as lamb. In Oregon a law has been passed making it necessary to properly label the carcass. That the Angora will not suffer from this is evinced by the fact that the carcasses have previously sold as lamb and that the consumer has been unable to detect any difference. As soon as the excellence of Angora mutton is more commonly appreciated, it will undoubtedly be in greater demand and its value will be enhanced accordingly.

ADAPTABILITY OF ANGORAS.

So far as temperatures are concerned, the Angora flourish in any part of the United States. In Turkey and South Africa the ranges in temperature are almost if not quite as great as those of the United States. It is claimed that the coldest weather will not affect them, provided it is dry. In Montana the goats are undaunted by the heavy snowfalls so long as they have a dry place for the night.

In Texas, New Mexico and Arizona the high temperatures make it necessary to shear the goats twice a year, but the heat has apparently no ill effects upon the health of the flocks.

Wet and swamp land, wherever it may be, is unsuitable for Angoras. The native home of all goats is upon the high hills and mountains and their preference for altitudes is still manifested by their ascending to the highest available point, if it is only the feed trough. Well-drained land and pure water are very essential for the health of the flock. The fact that these conditions are common to considerable portions of this country, and that flocks of Angoras are to be found in almost every State, would indicate that the country as a whole is fairly well adapted to the Angora industry. However, a closer scrutiny of the conditions will show that some sections are especially favored, and that the industry will probably always be largely confined to these. The large areas of new lands, the comparative low values of these, and the almost ideal climate have combined to create and maintain the industry in the Willamette Valley and the surrounding country, and the great amount of cheap range lands in Texas, Arizona and New Mexico has fostered it in the Southwest.

BUILDING UP A FLOCK.

As mentioned before in this bulletin, when Angoras were first brought to America, considerable crossing was practiced with the common goat. At that time breeding stock was scarce, and it was necessary to increase the supply by any practical means. It was found that the first and second crosses upon the common goat produced little mohair and a large amount of kemp, and that it was necessary to cross with a pure Angora five or six times before a really superior animal could be produced. In the past the fifth cross has been considered to produce a purebred. Beginning with common does and crossing with Angora bucks was necessary at the beginning of the industry, but it would no longer be profitable to start a flock in this way. It would be far better to buy a few purebred Angoras outright and develop a flock from these by the natural increase.

MANAGEMENT OF THE FLOCK.

Contrary to a former common opinion Angoras need considerable care and personal attention. The kids are especially in need of this, and if it is denied them a large mortality among them often results. For this reason it has been found inadvisable to turn them out with the does before they are 6 weeks or 2 months old.

Sheds or other shelters must be furnished both in the adults and the young, and if the country is infested with dogs or wild animals a dog and wolf proof fence should be built about the pasture. The expense of this will be repaid in a few years.

The management of a flock of Angoras does not differ radically from that of a flock of sheep. It is not considered necessary to have a herder constantly present with the flock. A dog is often sent out to herd and guard them, the herder riding out two or three times during the day to

note the direction of the flock and see that they do not roam too widely.

BREEDING.

The age at which the does should be bred has an important bearing on the welfare of the flock. The general opinion prevails that if they are forced to bear the burden of reproduction before they are 18 months old their growth will be stunted. Neither is it regarded advisable to use the bucks for breeding purposes before they attain this age.

The goats are supposed to be in their prime when from 2 to 6 years of age, but they have been known to reproduce regularly up to the age of 15 years. It does not generally pay to keep them too long, as the mohair becomes continually coarser with advancing age.

The does come in heat during August and September. The bucks also have a period of heat, but it usually starts sooner and lasts longer than that of the does. The time the does should be bred depends upon the climate. The kids are not so hearty or able to take care of themselves as lambs. If they come early and have not proper shelter and care a great many of them will die if the weather is cold and wet. A single bad night has caused the loss of 50 per cent of the kid crop in flocks of the Southwest where the shelter was insufficient.

The number of does a buck will cover satisfactorily depends upon the vigor and fertility of the individual and the care and food received. From 40 to 50 is a common average. The gestation period is from 147 to 155 days, or 5 months, as it is more commonly expressed.

NUMBER OF KIDS.

The does usually drop single kids, twins being rather uncommon. The Tariff Board found that the kid crop

in the flocks investigated was about 65 per cent. Some authorities hold this figure too low. It is certain that in some well-managed flocks the average is from 100 to 120 per cent. A record of extraordinary fecundity is the one of a doe that produced twins, quadruplets, and triplets in three successive seasons.

FEEDING.

It is a good plan to feed a little heavier previous to kidding to start the milk flow. A small amount of grain is often desirable. It is not meant by this that the goats should be underfed at other seasons of the year. Some people have been of the opinion that all that is necessary for the Angora is to turn them out in the Winter, regardless of the depth of snow. They cannot be expected to browse under these conditions if they cannot reach the twigs. Some breeders cut down the high trees, and this makes very satisfactory browsing, but other feed, both hay and grain, is necessary, especially in the Northern climates, if good results are to be expected. Flocks have been wintered out, however, without artificial feeding as far north as Nevada.

Angoras are very particular about the cleanliness of their feed, and if it be pulled out of the manger and trampled under foot they refuse to touch it. For this reason it is considered the better plan to have an opening in the manger large enough to permit the entrance of the goat's head rather than to make it small, thus necessitating the pulling out of the hay in bunches with a large part of it falling upon the ground.

SHEARING.

In the Southwest shearing is done during February and March in the Spring and the Fall clip is removed in September or October. In other sections shearing usually

takes places during March and April. It should be done before shedding begins, but it should not take place too early or the goats may suffer severely from the cold. Both hand shears and machines are used, but shearing by the latter means has increased rapidly during the last few years.

Goats are not so gentle in the hands of the shearers as sheep, and many men, especially beginners in the industry, are anxious to know how best to handle them during the operation of shearing.

The late F. W. Ludlow, of Lake Valley, N. Mex., devised a shearing table, which has proved to be of great service. It is a collapsible trough, or combination table and trough.

Mr. Ludlow's description of this table is given herewith:

The table is simple in construction. It is about 22 inches high, 2 feet 10 inches long, and 21 inches wide. The top is composed of two 9-inch sides, which are hinged to the 3-inch centerpiece. On the lower side of these movable flaps is a narrow piece 8 inches long, which catches on the framework of the table when the sides are lifted and holds them stationary. When the sides are elevated the top of the table forms a trough 3 inches wide at the bottom and possibly a foot wide at the top. Into this trough the goat to be shorn is thrown, feet up. A small strap, which hangs from the end of one of the sides, is run over the goat's neck and fastened to the other side. The goat's head is hanging over the end of the table and the strap prevents it getting free. The belly and legs are then shorn. The legs of the goat are then tied together, the strap removed from the neck, and the sides of the table dropped, so that one has a plane surface on which to shear the rest of the animal. An untrained man can shear 100 goats a day with a shearing machine and such a table.

THE KIDDING SEASON.

The kidding season is an important one upon the Angora farm, and problems are presented that are often puzzling, especially to the beginner. The following two methods of handling the flock as described by a Western breeder have given general satisfaction.

The Corral Method.—This method may be used with any number of goats. With various modifications and adaptations which best suit the size of the flock, the climatic conditions, the facilities for feeding, etc., it may be used by the beginner with success. We have practiced this method in Nevada for more than 25 years. If the herd is a large one, say 1,000 head, three men are required to handle the goats at kidding time. The service of the bucks is so managed that the kids will be dropped gradually several weeks. At the height of the season we expect from 75 to 100 kids a day. The season lasts about 30 or 40 days. Fortunately, most of the kids are dropped in the daytime.

We have four or five small corrals fenced with 36-inch woven wire and large enough to hold 50 does and their kids. The doe should be allowed plenty of room, because if too close to her neighbor she may adopt the other doe's kid. Besides these small corrals, two large ones are needed, each large enough to hold 1,000 does. Along the fence of one of these corrals are a dozen small pens just large enough to hold a doe and kid. At the gate of this large corral a jump board is placed. This jump board is intended to keep back those kids which are not large and strong enough to jump over it. A 2-inch board about 18 inches high will answer the purpose. Another device sometimes used is a platform open at the end, so that the kids may run under it, and thus avoid being trampled upon when the goats are going out over the platform.

The small corrals may be made of panel fence and located in a meadow where some feed is afforded. The

does should always have some kind of feed at kidding time.

In the morning the flock is carefully examined, and all does which show signs of kidding during the day should be separated and placed in one of the small corrals. The large flock is now turned out, and one of the men is sent with them with instructions to take the herd at once as far as he intends to go for feed that day, and then to let them feed over a limited area and gradually work their way home. A few does will drop their kids on the range, and the herder should carefully note the number and their location. He should see that the herd does not feed around one of these does, as she is apt to leave her kid and join the band, thus necessitating much extra work in finding the kid and in giving it to its mother. Early in the afternoon the band is placed in one of the large corrals. Now, the herder and another man go out with a wagon or on foot and carry the kids home, gently driving the mothers. The kids should not be handled or rubbed against one another more than is necessary, as the doe knows her kid by the scent. These does and kids are placed in the small corral which contains the does held back in the morning with the expectation that they would kid during the day. We now have one day's kidding in one of the small corrals. The does and kids should be watched to see that they are properly arranged. Do not bother them more than is absolutely necessary. Do not be in a hurry to make a doe own a kid. Do not drive the goats around one of the small pens.

The does should remain with their kids in the corrals for a day or two at least, or until the kids are properly mothered. Any does which have not kidded should be taken out. The next morning any kids which may have been born during the night are put in another small corral with their mothers, as well as the does which are expected to kid during the day. The procedure of the pre-

vious day is repeated. In about three days, if one has limited quarters, the first day's mothers and kids may be put in the second large corral—that is, the one with the jump board at the gate. Now this "wet" band is placed in charge of one of the men and sent out to feed. The gate is opened, the mothers passing out over the jump board, and the kids remain in the corral. The herder must not range his goats near the does that are kidding upon the range, and he should be cautioned to come in later than the "dry" band, so as to avoid any possibility of their mixing. When his band arrives at the corral, the gate is opened and each mother hunts for her kid. Some of the kids may not find their mothers, and if after a day or two there are a few unnonrished kids and some does not over-distended udders they should be placed together in the small pens along the side of the corral. The doe will own the kid in a day or two whether she is its mother or not. The kids should not be allowed to become too weak before this is done. If one does not have enough small pens a doe may be held while two or three kids suckle her, and thus tide them over until some of the small pens are vacant.

The next day the second day's kidding is added to the wet band. The wet band thus gradually grows, while the dry band decreases. During the day two men will be employed at herding the dry and wet bands, respectively, and the third man will be kept busy inspecting the kids, feeding the does in confinement, etc. If the weather is stormy, some of the kids will have to be sheltered. The advisability of having kids dropped gradually through a period of 30 or 40 days will readily be seen. If help is inexperienced, that may be gradually trained, or if the weather is stormy there will be time to get all things arranged properly.

The kids should not be allowed to go with their mothers until they are about 6 or 8 weeks old. If they go before this, they will probably become tired very soon

and go to sleep. When they awake, the hand will have gone and they are liable to be lost. During the day, while the mothers are feeding, the kids would eat a little grass if they could be herded near the corral.

As stated before, there may be many modifications of this method which will suggest themselves, but the above is a general outline of a method commonly in use.

The Staking Method.—This method is largely employed, even with large flocks, in New Mexico, but is possibly best suited to small flocks. It is without doubt the best method for certain surroundings. About the same amount of help will be required as with the corral method. There should be a good supply of stakes similar to tent stakes. There should also be a supply of swivel blocks which are about 4 inches long and having a hole bored near each end. A piece of rope about 6 inches long is fastened to the stake and the other end is passed through one of the holes in the swivel block and a knot tied in the end. Another piece of rope of equal length is likewise knotted and passed through the other hole of the swivel block, the loose end being tied to the kid's leg. Any swivel will take the place of this primitive method. The herder or owner can busy himself during the winter months by making stakes and swivels and by cutting and attaching the ropes.

When a kid is born it is taken to a convenient place to stake, and the mother is gently coaxed to follow. The stake is securely driven into the ground, and the kid fastened to it by the hind leg. The mother is left with the kid in order that she may know where to find it upon return from feeding. The kid should be staked where he can get plenty of sunshine, shade and shelter. A small bush, a post, or a box will answer the purpose admirably. If there are twins, they must be so staked that they can suckle at the same time. The rope should be changed from one hind leg to the other occasionally to prevent

unequal development. Sometimes a vigorous kid gets thoroughly tangled and requires help.

The kid may thus be left staked until he is old enough to go with the flock, which is after six or eight weeks or he may be put in a corral after a few days, as is done in the corral method.

There are many successful breeders who use this method entirely. One may expect to get good results if he follows either the corral or staking method carefully.

There is very small loss among kids cared for as set forth above. Many of the breeders on a large scale report the percentage of increase as 100. This does not mean that every kid lives, but that so few die that the loss is offset by the number of twins that are dropped.

The most practicable fencing to be used at kidding time is made of portable panels. By the use of these panels a pen may be made larger or small, and be moved from one place to another without difficulty and with very little work.

Does will occasionally refuse to own their kids. In such cases they should be tied up and compelled to allow the kid to suck. Small claiming pens are handy for these motherlike creatures. Tying a dog near them has had the effect of inducing them to mother their offspring sooner than they would have otherwise done.

CASTRATION.

All buck kids not intended for breeding purposes should be castrated when from 2 to 4 weeks old. This is best accomplished by cutting off the lower third of the scrotum with a sharp knife, forcing down the testicles one at a time with the thumb and forefinger of one hand and pulling them out with the spermatic cord attached with the other hand. A good firm grip should be taken so that one's fingers do not slip off. A 3 to 5 per cent

solution of creolin or carbolic acid will keep out infection and repel the flies.

WEANING.

Kids should be weaned when from 4 to 5 months of age. Buck kids older than 5 months should never be allowed to run with the does, as they will often breed, beside causing endless annoyance to the does.

ASSOCIATIONS.

The American Angora Goat Breeders' Association was organized in 1900. This association up to the present time has recorded about 50,000 animals. Mr. R. C. Johnston, Lawrence, Kansas, is the present secretary. There can be no doubt but that the association has done the industry a great deal of good. There has been considerable agitation in favor of an advanced registry, based upon superiority of the animals entered, but it is not possible to say the exact form this movement will take.

Other associations for the promotion of the Angora goat and the mohair industries are the National Mohair Growers' Association, founded September 23, 1909, and the Northwest Angora Goat Association, which came into existence January 8, 1910.

SCORE CARD FOR ANGORA GOATS.

There is no official American score card, but the following has been suggested by prominent breeders. Physical animal 25 per cent, subdivided as follows:

	Per Cent.
Size and constitution	15
Shape of body, head, horns, ears, etc., deducting for black spots on skin, colored hair, black streaks in hoofs, horns, etc., up to 10 points..	10

Pleece 75 per cent, subdivided as follows:

Must be soft, silken, velvety, with small compact ringlets	30
Must be of evenness in length, density and growth 1 inch or more per month, which gives weight	20
Freedom from kemp	15
Luster	10
Total	100

PROGRESS IN THE WORK OF TICK ERADICATION
FOR THE PERIOD JAN. 1, 1918 TO JAN. 1, 1919.

PRELIMINARY WORK.

	Number of cattle dipped.	Vats constructed.
January	12,591	25
February	4,608	23
March	7,532	38
April	12,706	41
May	59,943	31
June	68,194	29
July	90,168	26
August	125,846	23
September	122,423	39
October	80,628	16
November	126,863	8
December	85,555	25
Total		324
Vats previously constructed.....		516
Total dipped	804,657	—
Total vats		840

The number of cattle dipped shown in this list was done voluntarily upon the part of the owner.

*SYSTEMATIC WORK.

	Number herds dipped.	Number cattle dipped.	Number herds free.	Number cattle free.	Number herds ticky.	Number cattle ticky.	Vets constructed this month.	Vets previously constructed.
June	2,660	42,654	872	5,048	2,194	37,667	....	116
July	4,229	64,887	1,714	26,237	2,984	38,350	....	116
August	5,281	74,481	3,153	48,451	2,108	26,050	1	116
September	5,472	73,529	4,075	57,848	1,307	15,681	....	117
October	4,259	60,740	3,762	65,737	497	5,003	....	117
November	4,509	61,802	4,129	60,437	437	1,870	....	117
December	42	428	32	371	10	57	....	117

*This work was conducted in Orange and Lake Counties and that part of Palm Beach County north and east of the Hillsboro drainage canal.

COUNTY DEMONSTRATION AGENTS.
FLORIDA.

COUNTY.	AGENT.	ADDRESS.
Alachua	C. D. Gunn.	Gainesville.
Baker	J. S. Johns	Macclenny.
Bay	J. D. Dell.	Panama City.
Bradford		Starke.
Brevard	C. D. Kime.	Titusville.
Broward		Pt. Lauderdale.
Calhoun	J. E. Yon.	Blountstown.
Citrus	J. E. King	Lecanto.
Clay	W. T. Nettles	Green Cove Springs.
Columbia	W. T. Henry	Lake City.
Dade	J. S. Rainey.	Miami.
DeSoto	W. A. Sessoms.	Arcadia.
Duval	W. L. Watson.	Jacksonville.
Escambia	C. W. Burnett.	Pensacola.
Flagler	W. H. Deen.	Runnell.
Franklin		Apalachicola.
Gadsden	M. N. Smith.	River Junction.
Hamilton	S. S. Smith.	Jennings.
Hernando	Jas. Mountala	Brooksville.
Hillsboro	R. T. Kelly.	Plant City.
Holmes	J. J. Sechrist.	Bonifay.
Jackson	L. J. Thompson.	Marionna.
Jefferson		Monticello.
Lafayette	J. L. Poore.	Mayo.
Lake		Tavares.
Lee	J. M. Borling.	Ft. Myers.
Leon	R. I. Mathews.	Tallahassee.
Levy		Bronson.
Liberty	H. G. McDonald.	Bristol.
Madison	C. E. Mathews.	Madison.
Manatee	O. W. Caswell.	Bradentown.
Marion	H. Blackburn.	Ocala.
Nassau	W. W. Ward.	
Okaloosa	H. J. Hart.	Laurel Hill.
Okeechobee	L. E. Davis.	Okeechobee.
Orange	E. F. DeBink.	Orlando.
Osceola	M. M. Javens.	Kissimmee.
Palm Beach	R. A. Conkling.	West Palm Beach.
Pasco	R. T. Weaver.	Ocala City.
Pinellas	*J. H. Jeffries.	Clearwater.
Polk		Kathleen.
Putnam	L. Cantrell	Palatka.
Santa Rosa	H. T. Oglesby	Milton.
Seminole	C. M. Berry	Sanford.
Sumter	M. S. Hill	Coleman.
Suwannee	D. A. Armstrong.	Live Oak.
St. Johns	K. W. Lord.	St. Augustine.
St. Lucie	Alfred Warren	Ft. Pierce.
Taylor	L. R. Moore.	Perry.
Volusia	R. E. Lentest.	DeLand.
Wakulla	W. T. Green.	Arrian.
Walton	J. W. Mathison	DeFuniak Springs.
Washington	Geo. E. Mend.	Chipley.

COMMERCIAL ORGANIZATIONS OF FLORIDA.

(List Compiled in 1919)

- Chamber of Commerce, Apalachicola, Franklin County.
- Board of Trade, Apopka, Orange County.
- Board of Trade, Arcadia, DeSoto County.
- Board of Trade, Archer, Alachua County.
- Commercial Club, Auburndale, Polk County.
- Board of Trade, Avon Park, DeSoto County.
- Board of Trade, Bartow, Polk County.
- Board of Trade, Bouifay, Holmes County.
- Board of Trade, Bradentown, Manatee County.
- Board of Trade, Brooksville, Hernando County.
- Chamber of Commerce, Callahan, Nassau County.
- Board of Trade, Carrabelle, Franklin County.
- Board of Trade, Cedar Keys, Levy County.
- Chamber of Commerce, Chipley, Washington County.
- Chamber of Commerce, Clearwater, Pinellas County.
- Board of Trade, Dade City, Pasco County.
- Board of Trade, Davenport, Polk County.
- The Commercial Club, Daytona, Volusia County.
- DeLand Commercial Club, DeLand, Volusia County.
- Board of Trade, Eustis, Lake County.
- Board of Trade, Fernandina, Nassau County.
- Board of Trade, Fort Landerdale, Broward County.
- Board of Trade, Fort Myers, Lee County.
- Ft. Pierce Chamber of Commerce, Fort Pierce, St. Lucie County.
- East Coast Chamber of Commerce, Fort Pierce, St. Lucie County.
- Board of Trade, Gainesville, Alachua County.
- Boosters' Club, Grand Ridge, Jackson County.
- Board of Trade, Green Cove Springs, Clay County.
- Boosters' Club, Greensboro, Gadsden County.
- Board of Trade, Haines City, Polk County.
- Board of Trade, Havana, Gadsden County.

- Board of Trade, Hilliard, Nassau County.
 Chamber of Commerce, Jacksonville, Duval County.
 Board of Trade, Jasper, Hamilton County.
 Board of Trade, Kathleen, Polk County.
 Board of Trade, Key West, Monroe County.
 Kissimmee Board of Trade, Kissimmee, Osceola County.
 Chamber of Commerce, Lake City, Columbia County.
 Chamber of Commerce, Lakeland, Polk County.
 Board of Trade, Leesburg, Lake County.
 Chamber of Commerce, Live Oak, Suwannee County.
 Baker County Board of Trade, Maccleanny, Baker County.
 Chamber of Commerce, Miami, Dade County.
 Chamber of Commerce, Millville, Bay County.
 Commercial Association, Molino, Escambia County.
 Board of Trade, Moore Haven, DeSoto County.
 Board of Trade, Mulberry, Polk County.
 Board of Trade, Mt. Dora, Lake County.
 Board of Trade, New Port Richie, Pasco County.
 Marion County Board of Trade, Ocala, Marion County.
 Board of Trade, Okeechobee, St. Lucie County.
 Board of Trade, Orlando, Orange County.
 Board of Trade, Palatka, Putnam County.
 Board of Trade, Panama City, Bay County.
 Chamber of Commerce, Pensacola, Escambia County.
 Taylor County Board of Trade, Perry, Taylor County.
 Chamber of Commerce, Plant City, Hillsborough County.
 Board of Trade, Punta Gorda, DeSoto County.
 Boosters' Club, Quincy, Gadsden County.
 Board of Trade, Quincy, Gadsden County.
 Board of Trade, Sanford, Seminole County.
 Commercial Club, Sarasota, Manatee County.
 Board of Trade, Seffner, Hillsborough County.
 Board of Trade, Starke, Bradford County.

Chamber of Commerce, St. Augustine, St. Johns County.

Board of Trade, St. Cloud, Osceola County.

Board of Trade, Sebring, DeSoto County.

St. Petersburg Board of Trade, Pinellas County.

Tallahassee Chamber of Commerce, Tallahassee, Leon County.

*North Florida Chamber of Commerce, twenty counties; headquarters, Tallahassee, Leon County.

*Note: The North Florida Chamber of Commerce will give information about towns of North Florida that have no commercial organizations, from Hamilton, Suwannee and Lafayette counties westward to Escambia County.

Board of Trade, Tampa, Hillsborough County.

Board of Trade, Tarpon Springs, Pinellas County.

Pinellas County Board of Trade, Tarpon Springs, Pinellas County.

Board of Trade, Titusville, Brevard County.

Brevard County Board of Trade, Titusville, Brevard County.

Board of Trade, Trilby, Pasco County.

Board of Trade, Umatilla, Lake County.

South Florida Chamber of Commerce, Valrico, Hillsborough County.

Board of Trade, Vero, St. Lucie County.

Board of Trade, Waldo, Alachua County.

Board of Trade, Wanchula, DeSoto County.

Chamber of Commerce, Webster, Sumter County.

Association of Commerce, West Palm Beach, Palm Beach County.

Board of Trade, Winter Haven, Polk County.

Board of Trade, Winter Park, Orange County.

Board of Trade, Zephyrhills, Hillsborough County.

All special detailed information relating to localities covered by the organizations above named, will be promptly supplied on application.

POPULATION TABLES OF INTEREST.

FROM TABLE NO. 14.—POPULATION OF STATE BY RACES AND SEX IN CONGRESSIONAL DISTRICTS, BY COUNTIES:
CENSUS 1915.

COUNTIES.	Total Population of State 1915.		Voting Ages, 1915.			
	White	Negro	White males	White females	Negro males	Negro females
Total for First Congressional District ..	169,153	58,273	50,112	42,220	19,787	14,001
Citrus	2,859	2,276	825	704	880	497
DeSoto	18,823	3,294	5,499	4,418	1,177	680
Hernando	3,194	3,097	989	780	1,189	639
Hillshorough	65,754	17,880	19,120	16,158	6,062	5,400
Lake	7,933	4,488	2,448	2,243	1,546	1,004
Lee	7,195	1,487	2,204	1,720	613	394
Manatee	11,068	4,610	3,251	2,720	1,643	1,124
Pasco	7,187	2,447	2,242	1,833	946	527
Pinellas	14,144	4,644	4,625	4,212	1,445	1,331
Polk	27,972	11,469	7,551	6,283	3,802	2,499
Sumter	4,334	2,583	1,298	1,093	702	500
Total for Second Congressional District ..	107,918	102,779	27,306	24,302	26,644	22,765
Alachua	15,919	19,413	4,238	4,062	4,919	4,373
Baker	4,263	873	915	833	259	164
Bradford	11,605	4,537	2,770	2,529	1,199	953
Columbia	7,710	8,313	1,974	1,787	1,978	1,803
Hamilton	6,856	5,628	1,733	1,764	1,350	1,203
Jefferson	3,910	12,287	1,041	930	2,479	2,736
Lafayette	6,437	1,423	1,649	1,298	539	278
Levy	6,192	5,800	1,671	1,365	1,003	1,240
Madison	7,913	9,019	1,871	1,815	2,111	2,061
Marion	11,865	16,746	3,505	3,114	4,618	3,919
Nassau	5,276	4,726	1,411	1,228	1,343	1,198
Suwannee	11,815	8,471	2,808	2,560	1,884	1,881
Taylor	6,097	4,043	1,750	1,217	2,060	956

POPULATION TABLES OF INTEREST—Continued.

Total for Third Congressional District ..	127,234	93,729	31,897	28,704	23,309	22,714
Bay	9,340	4,178	2,720	2,238	1,469	936
Calhoun	5,135	2,333	1,178	1,021	678	461
Escambia	25,883	15,229	7,150	6,509	4,163	4,457
Franklin	2,700	2,642	732	760	781	745
Gadsden	7,323	15,666	1,905	1,765	3,384	3,915
Holmes	12,577	1,520	2,805	2,580	490	503
Jackson	18,501	18,848	4,153	3,927	3,539	3,728
Leon	5,093	15,038	1,394	1,371	3,310	3,955
Liberty	2,591	2,329	601	515	702	480
Okaloosa*						
Santa Rosa	14,634	6,111	3,694	3,141	1,917	1,385
Wakulla	3,268	4,398	746	617	963	801
Walton	12,031	4,442	3,008	2,800	1,226	1,68
Washington	8,128	2,995	1,881	1,548	728	586

*This county was created out of Santa Rosa and Walton Counties, but did not become a county under the law creating it until after the census was taken.

Total for Fourth Congressional District ..	157,491	105,611	50,702	43,917	34,604	28,681
Brevard	5,142	2,072	1,841	1,332	721	408
Broward	3,110	1,652	1,074	811	661	436
Clay	4,305	2,952	1,185	986	1,071	685
Dade	16,241	8,220	5,653	4,568	3,003	2,134
Duval	47,727	47,067	15,351	13,849	14,917	13,947
Monroe	14,698	4,009	4,624	3,648	1,281	1,333
Orange	10,052	5,345	3,134	2,987	1,639	1,408
Osceola	9,305	1,632	3,124	2,761	577	372
Palm Beach	6,409	3,062	2,212	1,849	1,060	848
Putnam	8,026	7,836	2,484	2,250	2,608	1,838
St. Johns	8,149	5,283	2,543	2,314	1,806	1,423
St. Lucie	6,331	2,258	2,029	1,455	909	472
Seminole	4,956	4,940	1,602	1,366	1,401	1,127
Volusia	12,950	8,833	4,086	3,741	2,011	2,158

CROP STATISTICS FOR 1913-14, 1915-16 AND 1917-18.

The attention of the reader is invited to the contents of the pages that follow, and the figures that give expression to the details of the tables giving the statistics of the agricultural, fruit and vegetable production, and also of live stock of all kinds.

The figures for the back years are used for the purpose of comparison. These are interesting as an indication of the substantial and wonderful growth of the State in the production of her soil and animal products. True there was a large increase in the acreages planted, and much of this was due to the patriotic spirit manifested by the farmers and others in winning the war for humanity, but this remarkable production was all the more creditable, as well as wonderful, considering the labor conditions and other disadvantages necessary to be overcome.

ACREAGES.

For the period included for 1913-14 the acreage planted to field crops was 1,081,434, an increase over that of 1911-12, of 144,170 acres actually cultivated. The acreage planted to vegetables and garden products for the same period was 93,413, or an increase of 30,172 acres in actual cultivation, over that of 1911-12, being over 30%

In 1915-16 the acreage planted to field crops was 1,478,428, showing an increase of 396,994 acres in the area planted to these crops in 1913-14. The acreage planted to vegetable and garden products, however, was only 68,955 or 24,458 acres less than the previous period. An examination of the causes for this discrepancy shows that it is attributed to two causes: first, the scarcity of potash and in many cases the absence of it which disarranged the usual formulas, that growers had been for years accustomed to using; and, second, the extremely high price of

these commercial fertilizers as fixed by the manufacturers. Whether these prices were necessary or warranted is questionable.

In 1917-18 the acreage planted to field crops exceed that planted to the same crops in 1915-16 by 52,910 and also exceeded the acreage planted in vegetable crop 36,690, making a total acreage under cultivation of 1,636,983.

These figures do not of course include the acreage of lands planted to fruit trees. They are listed under a different plan.

Elsewhere is published for the first time tables showing land and farm areas, in addition to acres actually cultivated, read it, it is interesting, it is part of table No. 1. See the footings of tables No. 1 and No. 2 for results in crop values, etc.

VALUE OF FIELD CROPS.

The value of the standard crops for 1913-14 amounted to \$18,861,389, showing an increase of \$2,809,659 in value over 1911-12, and in favor of 1913-14.

The value of these crops for 1915-16 shows a rather remarkable increase, the figures being \$21,613,300 as compared to \$18,861,389, the difference in favor of 1915-16 over that of 1913-14, being \$2,751,911.

The value of field products for 1917-18 indicates clearly what Florida soils can do when put to the test. The results show a remarkable situation in the shape of an increase of practically 50 per cent.

In 1915-16, the value of all field products was \$21,613,300, but in 1917-18, these figures were exceeded by \$9,532,604, or a total of \$31,145,904.

VALUE OF VEGETABLE AND GARDEN PRODUCTS.

The yield in value of these for 1913-14 was \$13,185,904,

showing an increase of \$5,129,219 or more than 60% over 1911-12. The value of these products, however, for 1915-16 are short of the previous period by \$2,461,385. The cause of this reduction is explained in the preceding paragraphs.

In this schedule the increase over 1915-16 is even more marked than in the field products, being \$8,113,630, or practically 75 per cent over and above the value of the same products in 1915-16.

FRUIT PRODUCTS.

The value of the fruit crops of the State for 1913-14 was \$13,447,435, an increase of \$3,422,272 over that of 1911-12. The value of these products for 1915-16 is \$13,511,950, or an increase of only \$64,515 over 1913-14. The cause for this is that both the output of the crops and the prices obtained for them differed comparatively little in either year period.

In this branch the same proportionate values hold good. The increase in value of fruit products for 1917-18 over those of 1915-16 is \$2,869,868.

When we take into consideration the effects of the cold snap in February of 1917, we consider the above results remarkably fine.

VALUE OF LIVE STOCK.

In 1913-14 the value of live stock on hand July 1, 1914, was \$29,541,931. In the period of 1915-16, on July 1, 1916, the value of live stock was \$29,869,842, showing an increase in value over 1913-14 of \$327,911. Undoubtedly this increase in value was held down by the decrease in number of live stock, large numbers being shipped out of the State to the West for beef, thereby keeping the supply depleted.

It is on this branch of farm industry that attention has been fixed for the past year or more, and we do

not think there will be much disappointment if figures convey the truth. In 1915-16 the total value on live stock in the State was placed at \$29,869,842. The figures for 1917-18 show the total value of live stock to have been \$62,573,373. This table is subdivided showing each class of stock and its increase on its own merits. We direct special attention to the details as appear in the table of total values. The figures as to cattle and hogs particularly should be convincing as to Florida's ability to grow live stock.

VALUE OF POULTRY AND PRODUCTS.

The value of poultry and products for 1913-14 was \$1,665,001, and for the period embraced in the year 1915-16 the value is shown as \$1,559,876. Thus there appears a decrease of \$105,125. The only significance to be attached to this occurrence is that the demand has been greater than the supply, a fact that should induce a greater extension of the industry; it will stand doubling and then fall short 50% of the demand.

In this industry both output and values have kept pace with the more pretentious rivals, as it shows an increase of \$1,433,367 for 1917-18 over the census of 1915-16. Certainly a fine showing. Thus even the feathered tribe proves its work in helping to defeat the "Hun."

VALUE OF DAIRY PRODUCTS.

The value of these products for 1913-14 was \$4,130,925, and the value of these same products for the period of 1915-16 is \$3,881,452 thus showing a loss of \$249,473. This apparent falling may be ascribed to the selling off of many of the cows as beef cattle, one of the very important matters in connection with the sale of cattle, that this Department has repeatedly warned live stock growers not

to do. If persisted in, growers cannot and need not expect to meet the demands.

Apparently the warning above made has had its effect if the wonderful increase in these products may be accepted as evidence; for in the entire history of the State, there has never been such a demand for dairy products, nor has the supply been so rapidly increased, and yet it falls far short of the demand. It is no exaggeration to say that were the supply twice as great, the demand would not be nearly supplied. There were in the period covered by this report 13,292,040 gallons of milk alone sold to the markets, for \$5,282,355.

The value of dairy products in 1915-16 was \$3,881,452.. and in 1917-18 they were \$6,017,296, showing an increase of \$2,135,844.

VALUE OF MISCELLANEOUS PRODUCTS.

The value of products included in this schedule being made up of numerous odds and ends, so to speak, varies to a considerable extent. This period covered by 1915-16 the aggregate value of these products amount to \$174,225.

There is an increase in these products also caused by the addition of new articles to the census. In this schedule the total shows \$312,933 of products, an increase over 1915-16 of \$138,708. The articles making up this list are yet unclassified.

YEAR 1913-14.

Table No. 8—Total Acreage of Crops.

Field Crops, acres	1,081,434
Vegetable and Garden Products, acres.....	93,413
Total Acreage in Cultivation.....	1,174,847

Table No. 9—Total Value of All Farm Products.

Table No. 1—Field Crops	\$18,861,389
Table No. 2—Vegetable and Garden Products	13,185,904
Table No. 3—Fruit Products	13,447,435
Table No. 4—Live Stock on Hand.....	29,541,931
Table No. 5—Poultry and Products	4,665,001
Table No. 6—Dairy Products	4,130,925
Table No. 7—Apiary Products	104,550
Total	\$83,937,135

YEAR 1915-16.

Table No. 8—Total Acreages of Crops.

Field Crops, acres	1,478,428
Vegetable and Garden Products, acres.....	68,955
Total Acreage in Cultivation.....	1,547,383

Table No. 9—Total Value of All Farm Products.

Table No. 1—Field Crops	\$21,613,300
Table No. 2—Vegetable and Garden Products	\$10,724,519
Table No. 3—Fruit Products	13,511,950
Table No. 4—Live Stock on Hand	29,869,842
Table No. 5—Poultry and Products	4,539,876
Table No. 6—Dairy Products	3,881,452
Table No. 7—Miscellaneous Products	174,225
Total Values	\$84,335,164

YEAR 1917-18.

Table No. 8—Total Acreages of Crops.

Field Crops, Acres	1,531,338
Vegetable and Garden Products	105,645
Total Acreage in Cultivation.....	1,636,983

Table No. 9—Total Value of All Farm Products.

Table No. 1—Field Crops	\$31,145,904
Table No. 2—Vegetables and Garden Products	18,838,149
Table No. 3—Fruit Products	16,381,818

Table No. 4—Live Stock on Hand July 1, 1918, Viz.:

Horses	\$ 3,764,451	
Mules	7,782,483	
Milch Cows	2,542,446	
* All Other Cattle	23,670,239	
Other Cattle Shipped	2,075,552	\$62,573,373
* Hogs on Hand	8,767,353	
Other Hogs	11,478,002	
Sheep and Goats	492,847	
Table No. 5—Poultry and Products.....	\$ 5,993,243	
Table No. 6—Dairy and Products	6,017,296	
Table No. 7—Miscellaneous Products	312,993	

Grand Total \$141,262,776

*The total number of hogs for the twelve (12) months would have been 2,164,722, if we could have included the 477,590 butchered and the 591,651 that were shipped out of the counties and the State for market by packers and others. The value of hogs butchered and shipped was for the butchered \$6,069,841, and those shipped \$5,408,161, or a total of \$20,245,355 for hogs alone, including those on hand July 1, 1918.

*There were 85,689 cattle exported from the counties and State by packers and feeders in and out of the State valued at \$2,075,552.

The following is a list of the County Enumerators, and their postoffice addresses, who performed the field work in gathering the Agricultural Horticultural, Live Stock and Industrial Statistics of the several counties. The result of this work is found in the tables that follow :

COUNTY	NAME	POSTOFFICE
1. Alachua	E. G. Spencer.....	Alachua, Fla.
2. Baker	J. W. Dowling.....	Macclenny Fla.
3. Bay	C. C. Mathis.....	Palama City, Fla.
4. Bradford	R. A. Green.....	Starke, Fla.
5. Brevard	Chas. H. Nelson, Jr.	Titusville, Fla.
6. Broward	Robert J. Reed.....	Ft. Lauderdale, Fla.
7. Calhoun	John R. Richards...	Blountstown, Fla.
8. Citrus	J. W. Knight.....	Inverness, Fla.
9. Clay	J. M. Williams.....	Green Cove Springs, Fla.
10. Columbia	Donald Tomkins....	Lake City, Fla., R. F. D.
11. Dade	M. W. Goode.....	Lemon City, Fla.
12. DeSoto	J. Edgar Albritton..	Arcadia, Fla.
13. Duval	Chas. R. Thebaut...	Jacksonville, Fla.
14. Escambia	Wm. J. Scott.....	R. F. D. "A," Atmore, Ala.
15. Flagler	F. A. Rich.....	Bunnell, Fla.
16. Franklin	W. J. Lovett.....	Apalachicola, Fla.
17. Gadsden	D. J. Mears.....	Hardaway, Fla.
18. Hamilton	L. R. Taylor.....	Jasper, Fla.
19. Hernando	Leroy McKeown....	Brooksville, Fla.
20. Hillsborough	Ben L. Blackburn...	Tampa, Fla.
21. Holmes	D. J. Grice.....	Bonifay, Fla.
22. Jackson	J. M. Blount.....	Grand Ridge, Fla.
23. Jefferson	W. B. Bishop.....	Lloyds, Fla.
24. Lafayette	J. P. Abbott.....	Mayo, Fla.
25. Lake	Walter H. Bell.....	Tavares, Fla.
26. Lee	John M. Borling....	Fort Myers, Fla.
27. Leon	W. J. Johnson.....	Chaires, Fla.
28. Levy	M. D. Graham.....	Bronson, Fla.
29. Liberty	Wm. A. Deason.....	Bristol, Fla.
30. Madison	H. R. Fox.....	Madison, Fla.
31. Manatee	W. M. Baxter.....	Bradentown, Fla.
32. Marion	M. L. Payne.....	Reddick, Fla.
33. Monroe	Chas. W. Chase.....	Key West, Fla.
34. Nassau	W. W. Ward.....	Boulogne, Fla.
35. Okeechobee	E. E. Davis.....	Okeechobee, Fla.
36. Orange	J. C. Merrill.....	Plymouth, Fla.
37. Osceola	Milton Pledger.....	Kissimmee, Fla.
38. Okaloosa	W. W. Hurston.....	Laurel Hill, Fla.
39. Palm Beach	W. C. C. Branning, Sr.	West Palm Beach, Fla.
40. Pasco	J. H. Pike.....	San Antonio, Fla.
41. Pinellas	A. C. Turner.....	Clearwater, Fla.
42. Polk	J. E. Bryant.....	Kathleen, Fla.

COUNTY ENUMERATORS—(Continued).

COUNTY	NAME	POSTOFFICE
43. Putnam	Julien de Nazarie...	Palatka, Fla.
44. Santa Rosa ..	Putnam Jernigan...	Milton, Fla.
45. Seminole	A. R. Chappell.....	Sanford, Fla.
46. St. Johns	John W. Davis.....	St. Augustine, Fla.
47. St. Lucie	F. Scott Waters....	Walton, Fla.
48. Sumter*	J. R. Wilkerson....	Wildwood, Fla.
49. Suwannee	H. E. Carter.....	Live Oak, Fla.
50. Taylor	W. E. Vann.....	Shady Grove, Fla.
51. Volusia	Otto R. Kirchoff....	DeLeon Springs, Fla.
52. Wakulla	John McKenzie.....	Sanborn, Fla.
53. Walton	D. L. Colvin.....	DeFuniak Springs, Fla.
54. Washington..	F. M. Russ.....	Vernon, Fla.

* Did not report—refused.

FARM LAND AREAS IN FLORIDA BY COUNTIES.

COUNTIES.	Number of Farms.	Average Acreage of Farms.
Alachua	3,314	95.7
Baker	1,076	42.1
Bay	1,853	22.0
Bradford	4,142	38.47
Brevard	942	75.7
Broward	1,171	16.9
Calhoun	1,365	53.4
Citrus	224	129.0
Clay	523	138.4
Columbia	3,256	45.0
Dade	4,125	6.7
DeSoto	5,565	30.0
Duval	10,800	9.53
Escambia	5,837	14.2
Flagler	225	89.7
Franklin	1,064	8.3
Gadsden	1,519	158.3
Hamilton	2,350	81.74
Hernando	325	34.45
Hillsborough	13,692	6.7
Holmes	1,925	55.0
Jackson	5,385	41.3
Jefferson	2,700	61.3
Lafayette	1,455	59.4
Lake	1,110	53.9
Lee	1,252	71.6
Leon	3,570	71.54
*Levy	705	77.9
Liberty	3,375	25.0
Madison	1,575	33.9
Manatee	4,870	43.84
Marion	52	137.0
Monroe	433	334.3
Nassau	1,401	69.3
Okaloosa	218	48.1
Okeechobee	2,306	47.
Orange	2,031	16.
Osceola	2,205	47.2
Palm Beach	2,565	24.53
Pasco	840	40.8
Pinellas	5,313	17.58
Polk	3,720	8.5
Putnam	1,575	43.52
Santa Rosa	993	20.35
Seminole	2,742	25.35
St. Johns	1,796	60.0
St. Lucie	2,955	54.1
*Sumter	1,415	11.48
Suwannee	4,210	12.9
Taylor	780	129.0
Volusia	1,743	44.5
Wakulla	1,857	48.1
Walton		
Washington		
Totals	133,347	

*Not reported.

FARM LAND AREAS IN FLORIDA BY COUNTIES.
Continued.

COUNTIES.	Total Acres In Farms.	Acres Improved.	Acres Unimproved.	Acres in Wood or Timber.
Alachua	317,264	175,738	27,891	118,925
Baker	45,277	26,236	8,500	7,055
Bay	5,802	3,185	89	1,628
Bradford	159,357	62,387	17,619	79,351
Brevard	71,466	0,443	40,734	21,429
Broward	19,802	16,482	2,817	503
Calhoun	72,850	20,742	2,541	49,587
Citrus	28,889	10,531	9,191	0,167
Clay	72,714	21,380	27,305	24,029
Columbia	129,400	88,570	39,470	6,580
Dade	29,661	14,348	15,313	.....
DeSoto	200,059	52,368	100,773	46,908
Duval	102,876	10,650	8,850	83,376
Escambia	82,788	24,245	28,180	32,363
Flagler	15,704	4,623	5,402	5,974
Franklin	8,512	1,762	3,200	3,550
Gadsden	240,502	60,895	81,241	98,286
Hamilton	183,916	68,701	46,534	68,381
Hernando	28,489	13,574	0,315	5,800
Hillsborough	91,721	45,071	16,003	29,747
Holmes	105,912	44,230	25,055	36,627
Jackson	222,496	143,792	7,238	71,466
Jefferson	185,491	86,401	42,716	86,374
Lafayette	86,428	36,785	4,695	45,048
Lake	55,935	17,358	17,875	18,702
Lee	89,596	17,745	38,977	32,874
Leon	256,067	106,168	45,867	104,532
Levy	88,001	22,500	21,250	44,251
Liberty	54,970	8,330	23,320	23,320
Madison	83,300	50,400	8,800	15,100
Manatee	53,397	17,593	2,447	33,347
Marion	212,547	107,747	31,173	73,627
Monroe	7,106	1,079	4,006	1,962
Nassau	144,739	7,184	106,040	31,597
Okaloosa	97,081	27,588	69,499	.....
Okeechobee	10,503	3,513	5,090	1,900
Orange	108,560	25,007	16,262	66,300
Osceola	32,496	9,159	13,526	9,811
Palm Beach	104,222	26,108	43,909	34,205
Pasco	62,928	25,626	23,240	14,053
Palmellas	34,333	9,087	13,531	10,815
Polk	102,246	31,206	17,272	33,768
Punta	31,613	20,338	6,333	4,932
Santa Rosa	68,580	11,476	28,597	28,513
Seminole	20,211	6,334	12,974	903
St. Johns	69,423	16,423	53,000	.....
St. Lucie	107,416	15,289	55,799	36,328
*Sumner	.....	.....	.....	.....
Swansee	159,876	106,928	20,417	32,531
Taylor	16,238	8,144	4,568	3,524
Volusia	54,272	25,830	2,899	25,543
Wakulla	100,699	24,699	38,150	37,841
Walton	77,360	31,821	45,548	.....
Washington	89,308	37,655	51,653	.....
Total	4,878,844	1,880,277	1,389,019	1,597,736

*Not reported.

FARM LAND AREAS IN FLORIDA BY COUNTIES.
Continued.

COUNTIES.	Approximate Area in Square Miles.	Approximate Area in Acres.	Acres in Actual Cultivation 1913-14.	Acres in Actual Cultivation 1915-16.	Acres in Actual Cultivation 1917-18.
Alachua	1,583	807,880	77,644	105,802	123,351
Baker	583	375,680	16,000	16,781	19,790
Bay	602	442,880	2,542	1,484	3,000
Bradford	522	344,960	43,880	57,867	59,413
Brevard	1,156	650,000	576	668	1,572
Broward	720	460,800	.....	5,902	13,800
Calhoun	1,060	762,880	13,775	19,861	31,662
Citrus	612	396,800	7,926	16,442	8,045
Clay	622	394,680	4,211	4,472	6,875
Columbia	702	506,880	56,249	61,302	83,960
Dade	2,373	1,450,720	13,081	10,288	9,751
DeSoto	3,755	2,402,560	9,778	12,229	34,468
Duval	822	503,040	9,046	5,207	6,740
Escambia	668	420,460	16,143	19,652	20,778
Flagler	484	309,760	.....	.....	5,513
Franklin	731	346,240	1,200	833	462
Gadsden	500	345,800	47,716	51,001	46,572
Hamilton	508	337,920	37,017	61,100	63,597
Hernando	475	316,080	3,175	6,924	8,025
Hillsborough	1,075	688,060	10,332	17,245	26,617
Holmes	485	293,120	38,466	36,466	59,890
Jackson	983	617,600	287,367	234,458	155,046
Jefferson	393	374,400	57,601	66,249	76,080
Lafayette	1,202	796,160	23,299	30,147	58,618
Lake	1,128	670,080	12,335	8,377	6,136
Lee	4,041	2,579,840	1,809	1,140	2,904
Leon	730	457,600	61,173	87,986	92,653
Levy	1,133	731,520	21,294	22,700	39,881
Liberty	726	526,720	5,620	5,849	7,052
Madison	693	460,160	66,771	71,914	73,334
Manatee	1,275	855,680	5,575	7,774	11,018
Marion	1,640	1,054,080	30,897	75,622	92,190
Monroe	1,125	704,000	692	.....	185
Nassau	645	403,200	0,414	7,093	5,930
Okaloosa	949	607,360	.....	34,616	40,712
Okeechobee	720	460,800	.....	.....	30,085
Orange	955	599,600	3,454	7,207	11,206
Osceola	1,431	915,840	1,694	2,626	2,034
Palm Beach	2,688	1,720,520	3,614	7,587	27,213
Pasco	750	490,660	6,300	11,076	15,345
Pinellas	234	149,760	747	2,209	1,652
Polk	1,967	1,220,480	6,678	6,770	14,739
Putnam	772	481,280	11,092	10,772	17,008
Santa Rosa	1,026	656,640	33,813	26,500	22,761
Seminole	860	280,400	3,096	2,960	8,255
St. Johns	630	407,040	32,611	26,556	36,115
St. Lucie	1,024	741,760	1,622	997	4,239
*Sumter	599	373,120	26,039	25,973	.....
Suwannee	680	442,880	.....	103,210	88,753
Taylor	1,100	680,960	10,048	17,741	15,275
Volusia	1,119	700,160	7,619	11,370	12,301
Wakulla	601	385,280	13,065	14,833	16,235
Walton	1,058	677,120	31,448	33,543	30,562
Washington	652	469,320	28,626	31,674	80,760
Totals	54,240	35,111,040	1,174,847	1,547,383	1,636,993

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.

COUNTIES	COTTON, UPLAND		
	Acres	Bales	Value
Alachua	749	237	25,490
Baker			
Bay	48	19	2,350
Bradford			
Brevard			
Broward			
Calhoun	327	78	5,775
Citrus			
Clay	93	42	4,520
Columbia	1,941	515	68,011
Dade			
DeSoto			
Duval	40	15	1,800
Escambia	2,258	708	83,520
Flagler	3	2	230
Franklin			
Gadsden	202	57	6,046
Hamilton	20	6	800
Hernando	728	230	24,860
Hillborough			
Holmes	3,958	1,327	217,772
Jackson	7,190	1,575	182,603
Jefferson	11,717	1,833	253,592
Lafayette	152	16	1,565
Lake			
Lee			
Leon	18,526	3,847	422,510
Levy	307	117	3,855
Liberty	21	8	815
Madison	893	134	14,200
Manatee			
Marion	129	60	60,180
Monroe			
Nassau	170	54	7,919
Okaloosa	1,562	526	65,134
Okeechobee	45	32	3,500
Orange			
Osceola			
Palm Beach	2	1	400
Pasco	33	19	3,740
Pinellas	5	2	260
Polk	10	2	520
Putnam			
Santa Rosa	1,745	615	73,700
Seminole	90	72	12,050
St. Johns			
St. Lucie			
*Sumter			
Swannee	173	37	6,394
Taylor	21	3	750
Volusia	264	52	6,055
Wakulla			
Walton	998	341	30,644
Washington	390	126	15,635
Totals	62,721	12,707	1,675,265

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	COTTON, SEA ISLAND		
	Acres	Bales	Value
Alachua	31,356	5,893	1,558,790
Baker	5,629	2,558	403,560
Bay			
Bradford	18,061	4,698	141,082
Brevard			
Broward			
Calhoun	30	9	2,500
Citra	2,267	630	183,740
Clay	485	123	31,124
Columbia	24,352	5,140	459,502
Dade			
DeSoto	100	60	14,095
Duval	12	1	250
Escambia	4	2	300
Flagler	30	15	3,124
Franklin			
Gadsden			
Hamilton	20,788	3,292	715,250
Hernando	806	213	77,150
Hillsborough			
Holmes			
Jackson	10	3	400
Jefferson	86	15	43,000
Lafayette	17,704	780	181,630
Lake	222	52	13,501
Lee	4	2	800
Leon	18	4	555
Levy	4,333	787	221,748
Liberty			
Madison	6,203	802	141,100
Manatee	118	5	800
Marion	13,505	2,917	722,897
Monroe			
Nassau	265	186	11,703
Okaloosa	14	4	1,100
Okeechobee			
Orange			
Osceola	40	10	950
Palm Beach			
Pasco	3,247	1,287	270,410
Pinellas			
Polk	181	43	12,611
Putnam	782	102	41,065
Santa Rosa			
Seminole	3	2	271
St. Johns			
St. Lucie			
*Sumter			
Suwannee	28,117	4,214	985,249
Taylor	223	39	5,400
Volusia	0	1	85
Wakulla			
Walton			
Washington			
Totals	179,113	33,679	7,686,101

*Not reported.

TABLE No. 1.—FIELD CROPS, 1917-18.
Continued.

COUNTIES	CORN		
	Acres	Bushels	Value
Alachua	53,522	617,298	\$ 721,405
Baker	8,739	118,614	247,121
Bay	1,984	18,783	23,174
Bradford	24,001	271,330	398,714
Brevard	213	983	1,745
Broward	1,412	25,052	44,946
Calhoun	15,829	164,892	329,784
Citrus	2,758	35,090	70,018
Clay	4,598	52,316	92,171
Columbia	32,966	335,261	406,532
Dade	67	1,205	2,045
DeSoto	12,815	209,163	274,987
Duval	3,047	73,510	145,886
Escambia	11,614	145,113	268,721
Flagler	1,916	31,064	50,069
Franklin	149	5,980	11,960
Gadsden	28,337	375,858	475,858
Hamilton	30,564	281,083	381,083
Hernando	4,394	77,780	108,330
Hillsborough	13,172	272,474	549,560
Holmes	28,916	285,087	498,819
Jackson	78,540	953,188	1,302,597
Jefferson	53,427	450,543	450,543
Lafayette	18,243	168,203	140,484
Lake	1,911	22,503	44,526
Lee	762	9,261	18,330
Leon	54,818	324,458	781,604
Levy	13,909	166,703	172,677
Liberty	4,864	57,304	86,540
Madison	56,748	554,478	554,478
Manatee	3,847	70,121	107,785
Marion	42,690	605,840	907,201
Monroe			
Nassau	3,351	53,702	77,260
Okaloosa	18,209	172,683	286,784
Okeechobee	1,123	15,031	30,037
Orange	6,075	88,946	176,199
Osceola	2,531	50,530	95,850
Palm Beach	10,688	70,925	135,816
Pasco	6,585	90,417	146,202
Pinellas	377	4,989	10,187
Polk	8,961	106,685	170,081
Putnam	8,326	194,290	273,440
Santa Rosa	11,804	125,365	249,097
Seminole	1,629	49,111	104,751
St. Johns	13,823	345,790	691,586
St. Lueie	319	3,761	9,006
*Sumter			
Suwannee	42,615	436,861	450,634
Taylor	9,665	69,691	84,771
Volusia	6,026	67,405	134,610
Wakulla	12,818	101,142	150,627
Walton	18,182	184,374	218,620
Washington	20,346	241,095	241,695
Totals	814,217	9,464,731	3,390,436

* Not reported.

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TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	OATS		
	Acres	Bushels	Value
Alachua	2,704	45,875	48,210
Baker	250	3,912	5,840
Bay M	56	915	915
Bradford	677	6,160	12,320
Brevard	7	60	150
Broward	419	6,018	6,018
Calhoun	74	1,165	745
Citrus	54	965	2,022
Clay	2,021	26,563	26,563
Columbia	89	1,848	4,030
Dade	51	1,143	2,285
DeSoto	371	5,489	5,489
Duval	8	200	250
Escambia	1,074	18,276	18,276
Hamilton	40	350	535
Hernando	12	110	220
Hillsborough	63	1,408	3,826
Holmes	584	3,897	3,884
Jackson	1,267	13,515	9,993
Jefferson	1,672	24,781	24,781
Lafayette	121	1,210	2,220
Lake	32	460	570
Lee	10	210	325
Leon	1,357	18,130	18,130
Levy	1,480	27,003	27,023
Liberty	113	1,880	1,233
Madison	1,504	14,939	19,760
Manatee	1,504	14,039	19,760
Manatee	25	230	385
Marion	1,448	20,456	29,084
Monroe	108	2,676	3,050
Nassau	437	5,271	4,190
Okaloosa	4	65	130
Okeechobee	7	80	150
Orange	59	497	1,340
Osceola	13	225	380
Palmer	54	566	614
Pasco	475	5,554	6,370
Pinellas	7	275	550
Polk	9	135	391
Putnam	336	2,095	5,164
Santa Rosa	120	1,005	1,059
Seminole	242	2,109	4,200
St. John	23	515	440
St. Lucie	301	2,633	2,790
*Sumter	648	6,925	6,925
Suwannee	120	1,005	1,059
Taylor	242	2,109	4,200
Volusia	23	515	440
Wakulla	301	2,633	2,790
Walton	648	6,925	6,925
Washington	648	6,925	6,925
Totals	20,378	276,363	312,838

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	WHEAT		
	Acres	Bushels	Value
Alachua			
Baker	7	470	670
Bay	1	20	40
Bradford			
Brevard			
Broward			
Calhoun	5	110	330
Citrus			
Clay	7	100	137
Columbia	15	150	800
Dade			
DeSoto	2	36	60
Duval			
Escambia			
Flagler			
Franklin			
Gadsden	3	90	180
Hamilton			
Hernando	1	20	60
Hillsborough	7	250	753
Holmes			
Jackson			
Jefferson	51	285	570
Lafayette			
Lake			
Lee			
Leon	12	240	480
Levy	7	69	155
Liberty			
Madison			
Manatee			
Martin	2	35	70
Monroe			
Nassau	18	230	410
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa	15	287	404
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Suwannee			
Taylor	11	790	790
Volusia			
Wakulla			
Walton			
Washington			
Totals	164	3,132	4,708

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.

Continued.

COUNTIES	SWEET POTATOES		
	Acres	Bushels	Value
Alachua	1,516	201,109	201,109
Baker	433	37,431	52,400
Bay	234	17,027	17,027
Bradford	1,435	101,407	79,541
Brevard	85	1,205	1,822
Broward	108	4,429	12,987
Calhoun	550	44,207	44,207
Citrus	94	9,968	9,968
Clay	648	49,948	62,857
Columbia	670	81,838	81,838
Dade	127	10,970	36,065
DeSoto	2,320	282,029	406,771
Duval	1,178	165,904	330,765
Escambia	844	40,298	62,911
Flagler	247	22,415	27,185
Franklin	100	20,000	40,000
Gadsden	1,118	88,424	88,424
Hamilton	1,005	55,972	55,567
Hernando	220	15,558	21,230
Hillsborough	962	107,035	214,071
Holmes	608	34,936	34,936
Jackson	2,299	211,230	162,960
Jefferson	1,636	147,568	147,568
Lafayette	416	41,844	41,844
Lake	108	4,817	6,305
Lee	247	24,050	47,748
Leon	2,261	203,160	190,280
Levy	1,066	201,871	201,766
Liberty	226	22,360	20,865
Madison	1,305	143,090	143,090
Manatee	93	12,666	17,095
Marion	2,385	200,930	200,504
Monroe	50	320	125
Nassau	554	76,096	80,730
Okaloosa	635	56,105	44,073
Okeechobee	145	11,589	20,698
Orange	364	26,217	48,754
Osceola	113	6,665	10,163
Palm Beach	393	36,332	62,002
Pasco	450	34,976	67,114
Pinellas	63	3,383	5,119
Polk	715	48,462	54,243
Putnam	613	88,611	125,914
Santa Rosa	711	64,665	66,987
Seminole	122	9,887	14,430
St. Johns	731	123,888	145,646
St. Lucie	200	5,496	7,696
*Sumter			
Swain	871	31,286	61,450
Taylor	1,331	17,338	17,745
Volusia	767	71,205	142,410
Wakulla	191	12,730	19,730
Walton	728	46,492	46,492
Washington	774	45,594	45,549
Totals	38,353	3,423,544	4,150,785

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	RICE		
	Acres	Bushels	Value
Alachua	10	100	100
Baker	6	227	675
Bay	68	1,951	3,782
Bradford	54	1,500	3,180
Bradford			
Brevard			
Broward			
Calhoun	115	2,186	4,372
Citrus	1	5	10
Clay	10	395	843
Columbia	14	413	1,066
Dade			
DeSoto	1,001	33,200	132,090
Duval	10	780	2,923
Escambia	68	1,387	2,633
Flagler	45	525	1,145
Franklin			
Gadsden	12	192	323
Hamilton	26	1,192	1,260
Hernando	86	1,230	3,150
Hillsborough	375	8,103	23,918
Holmes	201	4,165	4,165
Jackson			
Jefferson	42	449	1,308
Lafayette	43	400	810
Lake	4	43	112
Lee	32	1,538	2,992
Leon	14	208	596
Levy	14	208	596
Liberty	18	423	714
Madison			
Manatee	726	9,902	19,804
Marion	100	2,507	4,649
Monroe	2	40	96
Nassau	51	950	5,225
Ocala	58	1,274	2,362
Okeechobee	6	120	280
Orange	6	206	628
Osceola			
Palm Beach	2	52	204
Pasco	45	1,197	4,050
Pinellas	74	1,863	4,859
Polk	54	1,080	3,321
Putnam	22	365	666
Santa Rosa	71	2,113	3,319
Seminole	1	40	120
St. Johns	6	375	975
St. Lucie	12	54	200
*Sumter			
Suwannee	2	41	180
Taylor	17	357	841
Volusia	18	310	430
Wakulla	3	35	70
Walton	66	1,073	1,073
Washington	324	6,986	6,986
Totals	3,941	91,805	252,935

*Not reported.

TABLE No. 1.—FIELD CROPS, 1917-18.
Continued.

COUNTIES	SUGARCANE				
	Syrup.			Sugar.	
	Acres	Barrels	Value	Pounds	Value
Alachua	539	3,662	132,470	220	22
Baker	208	1,830	62,745		
Bay	120	289	8,670		
Bradford	543	3,879	98,975		
Brevard	5	2	5		
Broward					
Calhoun	387	3,286	65,600		
Citrus	107	548	15,312	100	
Citrus	107	548	15,312	100	10
Columbia	568	1,878	55,761	2,290	115
Dade	24	10	500		
DeSoto	1,185	5,281	370,246	400	40
Duval	291	1,350	41,455		
Escambia	182	787	23,323		
Flagler	18	76	3,653	200	20
Franklin	49	792	23,760		
Gadsden	999	9,784	208,655		
Hamilton	276	1,957	57,215		
Hernando	185	850	32,070		
Hillsborough	838	5,621	163,712		
Holmes	375	1,110	55,500		
Jackson	2,413	21,988	247,332		
Jefferson	327	1,891	37,826		
Lafayette	328	334	41,190		
Lake	26	58	3,250		
Lee	103	623	19,746		
Leon	589	3,006	77,220		
Lewy	370	2,280	66,888		
Liberty	113	1,004	21,430		
Madison	414	2,616	65,595		
Manatee	208	819	27,330		
Marion	653	3,561	105,881	100	8
Monte					
Nassau	139	1,021	30,407		
Okaloosa	192	876	29,142		
Okeechobee	38	406	16,453		
Orange	24	68	2,173		
Osceola	12	91	9,650		
Palm Beach	556	1,823	54,066		
Pasco	273	2,426	32,586		
Pinellas	57	255	11,154		
Polk	506	2,158	74,747		
Putnam	100	781	38,530		
Santa Rosa	276	926	31,846		
Seminole	4	12	484		
St. Johns	118	378	9,260	12,250	1,225
St. Lucie	74	215	6,795		
*Sumter					
Swansee	305	1,550	34,795		
Taylor	103	619	13,655		
Volusia	165	858	35,430		
Wakulla	100	985	31,655		
Walton	308	1,322	38,702		
Washington	410	2,013	36,680		
Totals	16,318	101,663	2,681,664	15,810	1,465

*Not reported.

TABLE No. 3—FIELD CROPS, 1917-18.
Continued.

COUNTIES	FIELD PEAS		
	Acres	Bushels	Value
Alachua	100	836	3,230
Baker	75	672	3,890
Bay	89	1,302	2,604
Bradford	428	4,054	12,162
Brevard	81	190	511
Broward	8	350	350
Calhoun	107	740	2,193
Citrus	116	942	2,710
Clay	423	2,832	8,154
Columbia	300	6,543	10,430
Dade	53	100	309
DeSoto	2,201	23,876	55,322
Duval	410	7,356	20,636
Escambia	175	1,007	2,728
Franklin	32	762	2,286
Gadsden	44	377	1,037
Hamilton	1,272	10,397	10,825
Hernando	44	390	1,185
Hillsborough	2,681	37,612	114,009
Holmes	302	1,822	3,649
Jackson	527	5,449	9,035
Jefferson	80	750	1,920
Lafayette	738	3,524	7,234
Lake	11	200	340
Lee	327	1,007	3,750
Leon	536	8,210	9,571
Levy	783	12,526	24,724
Liberty	75	672	1,937
Madison	342	622	2,081
Manatee	1,086	12,523	24,512
Marion	5	9	60
Monroe	119	1,175	3,232
Nassau	319	6,279	8,815
Okaloosa	31	489	1,015
Okeechobee	500	4,675	11,079
Orange	5	35	90
Osceola	30	845	2,500
Palm Beach	804	7,135	10,349
Pasco	7	80	175
Pinellas	90	2,711	5,090
Polk	762	11,035	33,343
Putnam	318	2,467	5,305
Santa Rosa	10	127	372
Seminole	33	2,235	4,470
St. Johns	164	147	1,073
St. Lucie	30	179	275
*Sumter	67	634	2,367
Suwannee	510	3,735	14,750
Taylor	122	1,225	2,450
Volusia	87	462	809
Wakulla	490	3,544	4,232
Walton			
Washington			
Totals	18,241	193,046	470,687

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	SOY BEANS		
	Acres	Bushels	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard			
Broward	22	865	1,915
Calhoun	3	20	70
Citrus			
Clay	2	29	57
Columbia	12	30	60
Dade			
DeSoto	6	75	185
Duval	4	150	450
Escambia	16	200	800
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	21	577	1,723
Holmes	2	10	20
Jackson			
Jefferson			
Lafayette			
Lake	1	50	100
Lee			
Leon			
Levy			
Liberty	9	25	75
Madison			
Manatee	3	29	170
Marion	214	2,166	6,538
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Palm Beach	199	8,905	26,565
Pasco	56	644	1,328
Pinellas			
Polk	1	11	64
Putnam			
Santa Rosa	6	42	96
Seminole			
St. Johns	2	300	600
St. Lucie	25	58	257
*Sumter			
Suwannee			
Taylor			
Volusia	114	728	2,915
Wakulla			
Walton	7	35	90
Washington			
Totals	690	14,952	43,570

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	FIELD PEA HAY		
	Acres	Tons	Value
Alachua	1,012	1,713	31,430
Baker	121	131	3,800
Bay	18	15	465
Bradford	144	137	3,425
Brevard			
Broward	5	20	350
Calhoun	150	127	3,305
Clats	18	17	330
Clay	260	344	9,600
Columbia	1,180	401	12,028
Dade	50	100	600
DeSoto	421	704	10,980
Duval	916	962	12,566
Escambia	176	127	2,743
Flagler	150	164	2,915
Franklin	32	63	1,805
Gadsden	722	807	22,012
Hamilton	208	228	5,940
Hernando	218	195	4,880
Hillsborough	360	684	21,050
Holmes	37	37	730
Jackson	433	251	3,735
Jefferson	444	239	6,935
Lafayette	35	54	1,620
Lake	112	45	810
Lee	122	123	1,270
Leon	2,370	2,028	58,100
Levy	71	82	1,720
Liberty	80	55	1,354
Madison	902	515	12,765
Manatee	43	24	460
Marion	1,305	872	19,724
Monroe			
Nassau	158	106	3,950
Okaloosa	23	18	375
Okeechobee	25	22	515
Orange	244	264	9,245
Osceola	55	72	1,800
Palm Beach	9	74	508
Pasco	335	524	8,685
Pinellas	11	25	515
Polk	346	338	9,025
Putnam	110	286	6,020
Santa Rosa	269	200	4,912
Seminole	77	97	2,157
St. Johns	158	168	3,320
St. Lucie	11	14	300
*Sumter			
Suwannee	330	231	6,287
Taylor	13	37	745
Volusia	746	605	18,150
Wakulla	99	188	3,110
Walton	94	86	1,740
Washington	18	14	290
Totals	15,331	14,097	342,786

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	HAY, NATIVE GRASSES		
	Acres	Tons	Value
Alachua	4,741	4,640	96,028
Baker	66	163	3,800
Bay	100	107	3,035
Bradford	1,319	974	19,480
Brevard	36	24	460
Broward	150	427	7,019
Calhoun	940	518	11,060
Citrus	201	182	3,507
Clay	298	205	5,570
Columbia	500	222	5,740
Dade	155	190	2,400
DeSoto	2,002	1,955	53,180
Duval	566	265	5,220
Escambia	1,398	868	17,807
Flagler	177	198	3,900
Franklin			
Gadsden	418	448	7,765
Hamilton			
Hernando	173	114	3,813
Hillsborough	1,449	1,580	55,044
Holmes	1,039	738	14,750
Jackson	3,173	2,182	22,069
Jefferson	400	117	2,875
Lafayette			
Lake	829	452	8,120
Lee	102	195	4,244
Leon	606	596	8,090
Levy	1,051	996	24,435
Liberty	80	50	1,182
Madison			
Manatee	372	597	7,210
Marion	2,830	2,268	43,739
Monroe			
Nassau	166	293	5,150
Okaloosa	1,191	716	14,315
Okeechobee	38	31	750
Orange	1,614	1,793	50,385
Osceola	814	1,112	30,190
Palm Beach	797	755	28,229
Pasco	161	165	3,275
Pinellas	801	871	17,430
Polk	915	964	27,781
Putnam	1,034	2,069	57,800
Santa Rosa	185	209	3,045
Seminole	1,933	1,121	21,562
St. Johns	8,619	6,938	137,875
St. Lucie	206	187	4,735
*Sumter			
Suwannee			
Taylor	4	6	180
Volusia	758	617	16,425
Wakulla	33	28	500
Walton	512	388	7,730
Washington	709	624	11,290
Totals	48,920	39,538	980,738

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	NATAL GRASS HAY		
	Acres	Tons	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard	3	1	23
Broward	26	41	826
Calhoun	16	7	160
Citrus	16	32	755
Clay	29	28	660
Columbia	53	12	250
Dade	2	2	48
DeSoto	78	69	1,685
Duval			
Escambia	7	7	160
Flagler			
Franklin			
Gadsden	28	27	970
Hamilton			
Hernando	489	114	4,867
Hillsborough	400	325	12,995
Holmes	8	4	80
Jackson			
Jefferson			
Lafayette			
Lake	1,075	635	13,615
Lee	40	90	1,200
Leon	225	190	2,810
Levy			
Liberty			
Madison			
Manatee	3	20	415
Marion	355	555	7,150
Monroe			
Nassau	11	7	140
Okaloosa			
Okeechobee			
Orange	3	7	200
Osceola	15	15	450
Palm Beach			
Pasco	90	86	2,020
Pinellas	3	11	283
Polk	331	261	5,710
Putnam	11	22	670
Santa Rosa	13	14	280
Seminole	19	19	525
St. Johns			
St. Lucie	22	13	251
*Sumter			
Suwannee			
Taylor			
Volusia	102	73	2,190
Wakulla			
Walton			
Washington			
Totals	3,481	2,487	60,812

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	KAFFIR CORN		
	Acres	Tons	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard			
Broward	9	30	500
Calhoun	4	10	260
Citrus	1	5	75
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia	1	1	20
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	11	11	350
Holmes	1	2	40
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	8	8	170
Leon			
Levy			
Liberty			
Madison			
Manatee	16	16	110
Marion	5	5	100
Monroe			
Nassau			
Okaloosa			
Okeechobee	1	9	180
Orange	10	22	960
Osceola			
Palm Beach	1	2	60
Pasco	1	1	10
Pinellas			
Polk			
Putnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie	5	6	151
*Sumter			
Suwannee			
Taylor			
Volusia	1	1	30
Wakulla			
Walton			
Washington	1	1	40
Totals	19	143	3,506

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	RHODES GRASS HAY		
	Acres	Tons	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard	1	2	40
Broward	12	30	500
Calhoun			
Citrus			
Clay			
Columbia			
Dade	310	1,000	10,000
DeSoto	3	3	60
Duval			
Escambia			
Flagler	1	2	50
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	3	3	90
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	2	4	80
Leon	2	6	60
Levy			
Liberty			
Madison			
Manatee			
Marion	2	2	50
Monroe			
Nassau			
Okaloosa			
Okcechohee			
Orange			
Osceola			
Palm Beach			
Pasco			
Piellas			
Polk			
Putnam			
Santa Rosa			
Seminole	5	9	260
St. Johns			
St. Lucie	21	28	845
*Sumter			
Suwannee	30	35	810
Taylor			
Volusia	16	16	480
Wakulla			
Walton			
Washington			
Totals	393	1,125	12,875

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	PARA GRASS HAY		
	Acres	Tons	Value
Alachua			\$
Baker			
Bay			
Bradford			
Brevard	1000	400	4,000
Broward	50	106	1,585
Calhoun			
Citrus	1	1	10
Clay			
Columbia			
Dade	119	235	1,980
DeSoto			
Duval			
Escambia			
Flagler	3	3	60
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette	5	5	150
Lake			
Lee	11	20	400
Leon	1	1	10
Levy			
Liberty			
Madison			
Manatee			
Marion	20	40	80
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach	51	151	3,042
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa			
Seminole			
St. John			
St. Lucie	83	33	975
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Totals	454	985	\$ 12,272

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	SORGHUM		
	Acres	Tons	Value
Alachua	12	22	220
Baker			
Bay	8	10	270
Bradford	18	40	1,000
Brevard	32	73	1,475
Broward	40	90	1,642
Calhoun	8	33	715
Citrus	33	44	895
Clay	21	20	2,880
Columbia	6	12	240
Dade	15	253	710
DeSoto	49	88	2,610
Duval	5	15	150
Escambia	4	36	180
Flagler	1	5	100
Franklin			
Adaden	20	30	585
Hamilton			
Hernando	6	27	330
Hillsborough	45	88	3,450
Holmes	32	32	650
Jackson			
Jefferson			
Lafayette	29	29	2,686
Lake	6	7	120
Lee	36	198	3,836
Leon	238	665	6,815
Levy	2	7	170
Liberty	4	5	105
Madison			
Manatee	33	48	910
Marion	315	911	9,812
Monroe			
Nassau	4	9	180
Okaloosa			
Okeechobee	1	6	120
Orange	26	165	2,370
Osceola			
Palm Beach	46	155	8,973
Pasco	44	46	885
Pinellas			
Polk	13	67	1,285
Putnam			
Santa Rosa	41	160	1,745
Seminole	4	8	145
St. Johna			
St. Lucie	90	293	4,055
*Sumter			
Suwannee			
Taylor	4	8	200
Volusia	2	3	75
Wakulla			
Walton			
Washington	31	44	760
Totals	1,323	3,704	63,230

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	KUDZU HAY		
	Acres	Tons	Value
Alachua			\$.
Baker			
Bay			
Bradford			
Brevard			
Broward	1	2	40
Calhoun			
Citrus	1	1	40
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia			
Flagler	1	1	25
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon	77	47	1,210
Levy			
Liberty			
Madison			
Manatee			
Marion			
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco	1	1	20
Pinellas			
Polk			
Putnam			
Santa Rosa	1	2	40
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington	3	2	40
Totals	85	50	\$ 1,415

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	MILLET		
	Acres	Tons	Value
Atachua			\$
Baker			
Bay		1	25
Bradford	29	34	838
Brevard			
Broward	11	33	770
Calhoun			
Citrus			
Clay	1	1	25
Columbia	3	1	30
Dade	2	4	60
DeSoto	2	4	50
Duval			
Escambia	11	15	300
Flagler			
Franklin			
Gadsden	5	11	320
Hamilton			
Hernando	1	2	50
Hillsborough	15	18	1,100
Holmes	1	1	20
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon	2	2	45
Levy	2	9	170
Liberty	4	2	50
Madison			
Manatee			
Marion			
Monroe			
Nassau			
Okaloosa			
Okcechobee	5	15	750
Orange			
Osceola			
Palm Beach			
Pasco			
Pinellas	1	1	20
Polk			
Putnam			
Santa Rosa	1	1	20
Seminole	1	1	25
St. Johns			
St. Lacie	2	2	60
Sumter			
Suwannee			
Taylor			
Volusia	12	10	300
Wakulla			
Walton	2	3	50
Washington			
Totals	117	169	\$ 5,078

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	MILO MAISE		
	Acres	Tons	Value
Alachua			
Baker	36	935	700
Bay			
Bradford			
Brevard			
Broward	5	10	500
Calhoun			
Clats			
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	24	168	1,130
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon			
Levy			
Liberly			
Madison			
Maratee	2	4	60
Marlon	12	30	520
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco	6	51	120
Pinellas			
Polk			
Pulnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie	4	1	25
*Sumter			
Swannsee			
Taylor	10	50	1,000
Volusia	10	0	270
Wakulla			
Walton			
Washington			
Totals	109	1,258	4,415

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	PEANUTS		
	Acres	Bushels	Value
Alachua	19,912	1,167,566	\$ 1,161,594
Baker	3,759	41,651	60,975
Bay	284	8,296	12,444
Bradford	9,746	195,530	295,295
Brevard			
Broward			
Calhoun	5,689	85,680	171,770
Citrus	1,445	35,154	70,309
Clay	118	1,472	3,973
Columbia	16,073	239,610	542,448
Dade			
DeSoto	1,275	24,153	49,328
Duval	37	830	1,000
Escambia	525	13,725	22,897
Flagler	2	225	425
Franklin			
Gadsden	8,671	172,877	401,877
Hamilton	9,734	135,853	135,903
Hernando	83	19,557	26,530
Hillsborough	1,452	31,938	94,779
Holmes	11,031	171,370	212,252
Jackson	45,035	231,694	543,463
Jefferson	4,800	99,703	89,703
Lafayette	8,339	237,890	358,844
Lake	172	5,307	7,891
Lee	71	2,797	6,043
Leon	5,774	108,899	153,651
Levy	9,784	205,641	296,139
Liberty	1,044	24,595	36,405
Madison			
Manatee	16	25	50
Marion	14,641	326,995	331,580
Monroe			
Nassau	287	7,890	9,014
Okaloosa	1,502	20,046	21,443
Okeechobee	128	2,015	7,823
Orange	13	320	695
Osceola	10	100	160
Palm Beach	949	36,288	110,293
Pasco	1,035	11,595	20,822
Pinellas			
Polk	95	1,254	3,314
Putnam	442	7,595	14,253
Santa Rosa	1,744	24,361	39,764
Seminole	12	150	1,300
St. Johns	4	250	500
St. Lucie	23	108	342
*Sumter			
Suwannee	15,362	274,331	301,977
Taylor	2,376	19,482	43,714
Volusia	693	9,010	29,460
Wakulla	2,530	50,130	75,475
Walton	2,755	36,009	38,809
Washington	6,561	82,702	86,702
Totals	217,129	4,183,411	\$ 5,643,020

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	TOBACCO—Open Field Culture		
	Acres	Pounds	Value
Alachua			
Baker	15	150	800
Bay			
Bradford			
Brevard			
Broward			
Calhoun			
Citrus			
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia	1	200	60
Fingler			
Franklin			
Gadsden	925	913,005	189,920
Hamilton			
Hernando			
Hillsborough	3	2,000	826
Holmes	31	842	631
Jackson			
Jefferson			
Lafayette	1	20	10
Lake			
Lee			
Leon	63	54,845	25,345
Levy	1	200	75
Liberty			
Madison			
Manatee			
Marion	31	2,420	630
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa	0	400	122
Seminole	1	75	10
St. Johns			
St. Lucie	1	82	34
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington	4	299	149
Totals	1,083	974,338	\$ 217,907

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	TOBACCO—Grown Under Shade		
	Acres	Pounds	Value
Alachua			\$.
Baker			
Bay			
Bradford			
Brevard			
Broward			
Calhoun			
Citrus	1	75	50
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia			
Flagler			
Franklin			
Gadsden	1,747	1,800,440	1,025,407
Hamilton			
Hernando			
Hillsborough			
Holmes	1	12	9
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon	74	69,400	62,310
Levy			
Liberty			
Madison	38	43,500	16,716
Manatee			
Marion			
Monroe			
Nassau			
Okaloosa			
Oklawaha			
Orange			
Osceola			
Palm Beach			
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Totals	1,981	2,123,427	\$ 1,224,582

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	WOOL—Spring Clip		
	No. Fleeces	Pounds	Value
Alachua			\$.
Baker			
Bay	500	1,500	900
Bradford	275	431	300
Brevard			
Broward			
Calhoun	2,201	6,580	3,934
Citrus			
Clay	450	1,310	743
Columbia			
Dade			
DeSoto	273	875	600
Duval	2,100	5,800	1,940
Escambia	2,047	6,801	3,988
Flagler	3,500	11,200	4,780
Franklin			
Gadsden	152	370	380
Hamilton			
Hernando	135	740	700
Hillsborough	1,000	2,500	1,450
Holmes	280	6,195	4,063
Jackson	250	850	638
Jefferson	71	400	400
Lafayette			
Lake			
Lee			
Leon	387	1,540	835
Lery	5	33	10
Liberty	1,398	4,400	3,033
Madison			
Manatee			
Marion	2,660	8,620	5,370
Monroe			
Nassau	1,930	5,601	2,749
Okaloosa	10,316	36,164	23,600
Okechobee			
Orange			
Osceola	2,300	7,000	5,600
Palm Beach			
Pasco	410	2,285	6,384
Pinellas			
Polk	500	2,000	2,400
Putnam			
Santa Rosa	13,125	40,261	21,850
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Suwannee			
Taylor			
Volusia	3,120	10,000	5,100
Wakulla	12	36	13
Walton	8,881	27,220	17,904
Washington	6,250	16,355	9,555
Totals	64,530	207,076	129,360

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	VELVET BEANS		
	Acres	Bushels	Value
Alachua	8,718	110,880	\$ 119,707
Baker	1,111	13,019	30,729
Bay	631	9,527	27,527
Bradford	2,604	24,503	34,503
Brevard	91	1,820	4,090
Broward	0	27	540
Calhoun	6,036	74,585	74,585
Citrus	684	10,325	18,985
Clay	713	6,762	14,923
Columbia	2,745	35,547	72,480
Dade	83	06	532
DeSoto	662	13,636	23,900
Duval	90	1,550	2,540
Escambia	662	7,358	10,052
Flagler	30	537	1,210
Franklin			
Gadsden	2,231	24,656	24,927
Hamilton			
Hernando	214	1,175	3,385
Hillsborough	1,407	29,307	176,406
Holmes	11,788	104,964	314,892
Jackson	13,915	51,609	14,334
Jefferson	1,110	6,420	6,420
Lafayette	4,435	21,058	81,704
Lake	66	680	680
Lee			
Leon	5,878	59,149	69,289
Levy	2,220	43,004	84,991
Liberty	1,297	11,269	21,056
Madison	160	980	1,920
Manatee	104	15	30
Marion	5,775	60,390	62,710
Monroe			
Nassau	426	5,329	7,908
Okaloosa	16,599	117,149	93,691
Okeechobee			
Orange	257	2,395	4,800
Osceola	27	390	630
Palm Beach	6	240	1,000
Pasco	631	6,906	13,994
Pinellas	1	25	50
Polk	42	808	1,889
Putnam	405	5,372	15,915
Santa Rosa	4,649	32,739	59,556
Seminole	1	35	50
St. Johns			
St. Lucie	307	1,028	1,028
*Sumter			
Swannee	383	2,545	3,867
Taylor	1,102	5,112	10,129
Volusia	505	3,546	10,638
Wakulla	2,295	22,980	22,980
Walton	0,524	50,488	50,488
Washington	0,544	77,852	77,852
Totals	117,263	1,059,776	\$ 1,675,493

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	VELVET BEAN HAY		
	Acres	Tons	Value
Alachua			
Baker	271	330	6,000
Bay	5	2	80
Brevard	8	5	110
Broward	2	50	250
Calhoun	86	53	1,305
Citrus			
Clay	152	234	2,043
Columbia	4	2	40
Dade			
DeSoto	17	19	340
Duval	82	63	1,190
Escambia	2,400	2,170	34,042
Flagler	11	11	225
Franklin			
Gadsden	5	5	100
Hamilton			
Hernando	4	3	70
Hillsborough	85	155	2,500
Holmes	121	35	700
Jackson	47	68	490
Jefferson	43	30	870
Lafayette			
Lake	40	22	440
Lee			
Leon	53	40	800
Levy	33	54	990
Liberty			
Madison			
Manatee			
Marion	70	67	790
Monroe			
Nassau	74	50	1,000
Okaloosa			
Okeechobee	5	32	150
Orange	52	76	1,710
Osceola			
Palin Beach	21	130	3,814
Pasco	190	1,038	4,030
Pinellas			
Polk	1	2	40
Putnam	123	332	6,520
Santa Rosa	319	488	9,020
Seminole			
St. Johns			
St. Lucie	16	5	166
*Sumter			
Suwannee	6	6	150
Taylor	30	35	1,000
Volusia			
Wakulla			
Walton			
Washington	5	4	55
Totals	4,382	6,232	\$ 85,119

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	RYE		
	Acres	Bushels	Value
Alachua			\$.
Baker			
Bay			
Bradford			
Brevard			
Broward			
Calhoun			
Clats	14	75	206
Clay			
Columbia	4	24	72
Dade			
DeSoto	1	20	40
Duval			
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando	2	20	80
Hillsborough			
Holmes			
Jackson			
Jefferson	127	1,660	3,200
Lafayette	6	60	120
Lake	8	100	100
Lee			
Leon	14	180	470
Levy	5	18	25
Liberty			
Madison	60	500	800
Manatee	1	50	200
Marion	11	108	335
Monroe			
Nassau	12	290	580
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco			
Piellas			
Polk			
Putnam	10	100	200
Santa Rosa	3		12
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Suwannee	45	125	200
Taylor	18	30	90
Volusia	3	30	90
Wakulla			
Walton			
Washington			
Totals	339	3,396	\$ 7,034

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	BROOM CORN		
	Acres	Tons	Value
Alachua			
Baker			
Bay			
Bradford	4	1	200
Brevard			
Broward			
Calhoun			
Citrus			
Clay			
Columbia	60	8	240
Dade			
DeSoto	1	1	40
Duval			
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	2	2	90
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon	4	2	150
Levy			
Liberty			
Madison			
Manatee			
Marion	5	6	120
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange	1	5	75
Osceola			
Palm Beach			
Pasco	8	12	1,100
Pinellas			
Polk			
Pulnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie			
*Sumter			
Swannnee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Totals	83	37	2,105

*Not reported.

TABLE NO. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	CASSAVA		
	Acres	Tons	Value
Alachua			\$
Baker			
Bay	1	1	25
Bradford			
Brevard			
Broward			
Calhoun			
Citrus			
Clay			
Columbia	2	1	20
Dade			
DeSoto	4	5	650
Duval	1	2	60
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	75	120	4,028
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	13	80	754
Lee	5	25	480
Leon			
Levy			
Liberly			
Madison			
Manatee	7	12	220
Marion	22	26	550
Monroe			
Nassau			
Okaloosa			
Oklawaha			
Orange	19	77	1,120
Osceola	9	18	900
Palm Beach			
Pasco			
Pinellas	6	39	780
Polk	2	20	400
Putnam	10	68	468
Santa Rosa			
Seminole			
St. Johns	2	8	400
St. Lucie	1	2	75
*Sumter			
Suwannee			
Taylor			
Volusia	19	43	305
Wakulla			
Walton			
Washington			
Totals	189	497	11,235

*Not reported.

TABLE No. 1—FIELD CROPS, 1917-18.
Continued.

COUNTIES	ALFALFA (LUCERNE)		
	Acres	Tons	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard			
Broward			
Calhoun			
Citrus			
Clay			
Columbia			
Dade	8	18	300
DeSoto			
Duval	43	170	740
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	1	1	30
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon			
Levy			
Liberty			
Madison			
Manatee			
Marion			
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach			
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa	1		35
Seminole			
St. Johns	2	3	75
St. Lucie			
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Totals	53	192	1,180

*Not reported.

TABLE NO. 1.—FIELD CROPS, 1917-18.
Continued.

COUNTIES	CASTOR BEANS		
	Acres	Bushels	Value
Alachua	1,720	8,224	44,572
Baker			
Bay	14	150	450
Bradford			
Brevard			
Broward			
Calhoun			
Citrus	166	1,897	4,394
Clay	133	905	2,743
Columbia			
Dade	205		
DeSoto	253	5,746	13,840
Duval			
Escambia	5	50	225
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando	4	95	285
Hillsborough	815		
Holmes	16	240	720
Jackson			
Jefferson			
Lafayette	116	1,015	4,845
Lake			
Lee			
Leon	466	7,795	23,385
Levy			
Liberty			
Madison			
Manatee			
Marion	273	1,889	6,409
Monroe			
Nassau			
Okaloosa			
Okeechobee	24	107	880
Orange			
Osceola	5	30	200
Palm Beach	719	85	353
Pasco	771	5,409	15,327
Pinellas			
Polk	1	40	120
Putnam			
Santa Rosa	2	25	75
Seminole			
St. Johns			
St. Lucie	752	385	1,015
Sumter			
Suwannee			
Taylor	10	340	970
Volusia			
Wakulla			
Walton			
Washington			
Totals	6,488	34,777	120,550

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.

COUNTIES	ONIONS		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay	0	330	337
Bradford	1	50	100
Brevard	4	315	502
Broward	16	2,445	1,020
Calhoun			
Citrus	3	206	387
Clay	2	91	144
Columbia	1	25	50
Dade	5	960	1,695
DeSoto	14	1,240	1,300
Duval	12	925	1,645
Escambia	1	79	170
Flagler	1	20	20
Franklin	11	2,150	6,450
Gadsden	1	15	30
Hamilton			
Hernando	1	50	200
Hillsborough	66	6,088	9,534
Holmes	1	50	100
Jackson			
Jefferson			
Lafayette	1	22	44
Lake	1	164	190
Lee	4	398	684
Leon	2	190	310
Levy	20	600	1,200
Liberty			
Madison			
Manatee	10	740	760
Marion	11	1,000	1,535
Monroe	7	363	564
Nassau	1	4	41
Okaloosa	1	60	65
Okeechobee	28	4,243	2,517
Orange	7	565	910
Osceola			
Palm Beach	804	62,894	130,123
Pasco	13	230	544
Pinellas	2	251	481
Polk	12	986	1,044
Putnam	1	25	75
Santa Rosa	16	120	1,096
Seminole	4	563	807
St. Johns			
St. Lucie	31	1,851	2,006
*Sumter			
Suwannee			
Taylor			
Volusia	20	4,035	5,900
Wakulla			
Walton			
Washington	1	6	15
Totals	1,155	94,489	\$ 175,529

*Not Reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	LETTUCE		
	Acres	Crates	Value
Alachua	152	24,355	\$ 29,870
Baker			
Bay			
Bradford			
Brevard			
Broward	2	150	300
Calhoun			
Citrus			
Clay			
Columbia			
Dade			
DeSoto			
Duval	2	550	950
Escambia			
Flagler			
Franklin	2	80	160
Gadsden			
Hamilton			
Hernando			
Hillsborough	132	21,950	44,222
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	11	1,072	918
Lee			
Leon	1	30	20
Levy	11	1,200	3,300
Liberty			
Madison			
Manatee	203	267,955	115,455
Marion	180	28,255	31,630
Monroe			
Nassau			
Okaloosa			
Oklawaha			
Orange	332	94,207	91,515
Osceola			
Palm Beach	40	9,000	18,900
Pasco			
Pinellas	7	1,110	1,015
Polk	90	68,142	26,203
Putnam			
Santa Rosa	5	250	275
Seminole	771	204,075	147,313
St. Johns			
St. Lucie	1	70	630
Sumter			
Suwannee			
Taylor			
Volusia	26	4,790	5,905
Wakulla			
Walton			
Washington			
Totals	2,681	747,340	\$ 518,874

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	CELERY		
	Acres	Crates	Value
Alachua			*
Baker			
Bay			
Bradford			
Brevard	5	1,000	2,000
Broward	2	370	890
Calhoun			
Citrus			
Clay			
Columbia			
Dade			
DeSoto	18	1,510	3,000
Duval	3	379	1,025
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	121	82,372	217,280
Itoules			
Jackson			
Jefferson			
Lafayette			
Lake	1	150	150
Lee			
Leon			
Levy			
Liberty			
Madison			
Manatee	660	297,113	188,350
Marion	8	2,150	2,150
Morroe			
Nassau			
Okaloosa			
Okeechobee			
Orange	5	1,200	1,200
Osceola			
Palm Beach	2	470	800
Pasco			
Pinellas	1	175	330
Polk	22	3,588	3,478
Putnam			
Santa Rosa	2	185	180
Seminole	802	463,088	379,305
St. Johns	1	6	18
St. Lucie	1	6	6
*Sumter			
Suwannee			
Taylor			
Volusia	2	540	840
Wakulla			
Walton			
Washington			
Totals	1,661	854,298	\$ 798,161

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	PEPPER		
	Acres	Crates	Value
Alachua	14	1,010	\$ 1,300
Baker			
Bay	1	12	4
Bradford			
Brevard	2	150	250
Broward	959	183,212	320,115
Calhoun			
Citrus			
Clay	1	10	30
Columbia			
Dade	181	13,068	29,785
DeSoto	3,081	44,800	48,560
Duval	6	765	1,104
Escambia	1	25	78
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando	1	25	59
Hillsborough	3	4,450	9,552
Holmes			
Jackson			
Jefferson			
Lafayette	1	2	4
Lake	2	100	250
Lee	215	60,741	138,592
Leon			
Levy	1	50	150
Liberty			
Madison			
Manatee	409	69,888	98,885
Marion	22	1,390	1,835
Monroe	35	275	350
Nassau			
Okaloosa			
Okeechobee	3	500	500
Orange	41	0,585	12,708
Osceola			
Palm Beach	2,646	337,747	547,924
Pasco	3	441	652
Pinellas			
Polk	14	2,132	2,281
Putnam	1		
Santa Rosa		35	50
Seminole	323	121,156	180,646
St. Johns	1	5	26
St. Lucie	34	3,189	8,142
*Sumter			
Suwannee			
Taylor			
Volusia	2	290	440
Wakulla			
Walton			
Washington			
Totals	8,030	845,213	\$ 1,363,264

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	IRISH POTATOES		
	Acres	Bushels	Value
Alachua	134	8,201	\$ 6,120
Baker	64	3,925	8,200
Bay	16	680	1,006
Bradford	32	3,270	5,520
Brevard	904	240,323	47,326
Broward	490	42,220	48,320
Calhoun	12	718	1,436
Citrus	7	980	1,469
Clay	532	55,493	15,394
Columbia	22	445	775
Dade	303	11,780	17,575
DeSoto	3,941	290,715	317,485
Duval	181	18,127	24,563
Escambia	237	13,992	25,299
Flagler	2,522	182,491	127,457
Franklin	28	5,700	17,100
Gadsden	2	114	228
Hamilton			
Hernando	50	4,930	3,775
Hillsborough	1,571	171,149	176,855
Holmes	44	2,130	2,693
Jackson			
Jefferson			
Lafayette	15	1,242	2,281
Lake	91	7,283	8,254
Lee	118	11,267	9,505
Leon	25	1,957	3,741
Levy	85	4,377	8,557
Liberty	1	40	80
Madison	1	50	200
Manatee	371	27,384	13,317
Marion	779	78,900	138,820
Monroe			
Nassau	10	916	1,448
Okaloosa			
Okeechobee	1,042	100,076	35,349
Orange	477	29,075	33,026
Osceola	884	55,520	55,350
Palm Beach	2,729	334,825	545,245
Pasco	47	3,280	6,525
Pinellas	103	9,705	12,964
Polk	737	54,503	41,493
Putnam	3,986	419,175	489,830
Santa Rosa	57	2,002	3,368
Seminole	301	42,590	39,126
St. Johns	14,574	2,183,874	1,087,020
St. Lucie	277	41,236	27,600
*Sumter			
Swannee	2	300	450
Taylor			
Volusia	801	78,840	92,785
Wakulla	1	60	175
Walton			
Washington	4	150	245
Totals	38,596	4,552,465	\$ 4,403,361

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	DASHEENS		
	Acres	Bushels	Crates
Alachua			
Baker			
Bay			
Bradford			
Brevard	7	200	1,240
Broward	19	1,170	1,505
Calhoun			
Citrus	1	10	20
Clay			
Columbia			
Dade	2	100	150
DeSoto	34	2,200	2,870
Duval	1	75	150
Escambia	1	60	60
Flagler	10	835	835
Franklin			
Gadsden			
Hamilton			
Hernando	3	100	100
Hillsborough	24	2,592	3,322
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	6	1,225	1,225
Lee			
Leon			
Levy			
Liberty			
Madison			
Manatee	10	1,100	300
Marion			
Monroe			
Nassau	18	3,117	3,754
Okaloosa			
Okeechobee	1	10	15
Orange			
Osceola			
Palm Beach	15	20,075	4,160
Pasco	36	3,752	4,140
Pinellas	1	45	135
Polk	4	220	316
Putnam	3	100	150
Santa Rosa	1	10	15
Seminole			
St. Johns			
St. Lucie	10	527	931
*Sumter			
Swannee			
Taylor			
Volusia	11	980	2,880
Wakulla	1	50	50
Walton			
Washington			
Totals	217	38,533	28,323

*Not reported.

TABLE NO. 2.—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	CABBAGE		
	Acres	Crates	Value
Balachua	485	62,080	\$ 61,903
Baker			
Bay	23	1,110	1,590
Bradford	8	825	1,050
Brevard	33	840	880
Broward	778	78,640	75,200
Calhoun	3	97	310
Citrus	2	285	300
Clay	5	301	817
Columbia	4	119	258
Dade	38	1,925	3,400
DeSoto	552	61,500	65,300
Duval	24	2,768	4,937
Escambia	8	761	1,640
Flagler	30	2,391	3,318
Franklin	24	4,900	14,700
Gadsden	1	15	75
Hamilton			
Hernando	18	315	450
Hillsborough	953	102,912	150,766
Holmes			
Jackson			
Jefferson			
Lafayette	50	195	400
Lake	577	22,322	24,565
Lee	159	17,478	7,527
Leon	1	95	115
Levy	74	14,450	28,600
Liberty	2	70	175
Madison			
Manatee	2,179	272,300	132,441
Marion	417	36,770	27,097
Monroe	30	300	430
Nassau			
Okaloosa			
Okeechobee	218	31,775	27,037
Orange	145	37,372	25,520
Osceola	23	5,360	8,780
Palm Beach	1,481	22,635	532,141
Pasco	2	214	220
Pinellas	68	8,834	3,927
Polk	1,018	100,819	80,434
Putnam	4	205	540
Santa Rosa	24	153	2,146
Seminole	209	26,017	30,590
St. Johns	8	168	438
St. Lucie	496	43,126	26,813
*Sumter			
Swansee			
Taylor			
Volusia	69	0,025	14,200
Wakulla	1	200	400
Walton			
Washington	3	54	123
Totals	10,253	1,032,379	\$ 1,358,633

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.

COUNTIES	TOMATOES		
	Acres	Crates	Value
Alachua	10	1,580	1,520
Baker			
Bay	7	300	300
Bradford	22	2,330	2,991
Brevard	17	815	1,935
Broward	6,025	1,135,556	1,022,705
Calhoun	1	5	10
Citrus	4	377	635
Clay	2	210	895
Columbia	3	155	295
Dade	7,693	860,090	1,323,175
DeSoto	383	34,224	35,294
Duval	21	1,860	3,390
Escambia	1	82	95
Flagler	1	25	50
Franklin	8	1,550	4,650
Gadsden	3	300	300
Hamilton			
Hernando	14	600	1,090
Hillsborough	102	29,522	54,961
Holmes	1	53	175
Jackson			
Jefferson			
Lafayette	16	1,648	2,509
Lake	22	2,411	3,220
Lee	267	31,436	47,365
Leon	3	288	505
Levy	1,218	1,510	3,510
Liberty	1	25	13
Madison			
Manatee	1,036	157,706	291,440
Marion	348	29,430	33,767
Monroe	149	5,606	7,766
Nassau			
Okaloosa			
Okeechobee	204	17,177	18,277
Orange	204	28,206	65,857
Osceola	3	800	650
Palm Beach	1,852	430,842	2,314,018
Pasco	13	1,011	1,604
Pinellas	3	265	600
Polk	111	10,926	14,486
Putnam	3	545	895
Santa Rosa	20	248	1,805
Seminole	114	24,999	47,209
St. Johns	2	120	250
St. Lucie	323	31,883	60,810
*Sumter			
Suwannee	2	105	68
Taylor	1	10	18
Volusia	37	4,745	6,010
Wakulla			
Walton			
Washington	10	311	360
Totals	21,166	2,832,426	\$ 6,287,557

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	SQUASHES		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay			
Bradford	3	200	400
Brevard			
Broward	113	15,253	25,865
Calhoun			
Clarus			
Clay			
Columbia			
Dade	5	410	620
DeSoto	74	10,570	9,505
Duval	1	280	460
Escambia	1	5	7
Flagler			
Franklin	3	220	440
Gadsden			
Hamilton			
Hernando			
Hillsborough	39	4,300	5,316
Holmes			
Jackson			
Jefferson			
Lafayette	10	540	817
Lake	28	3,475	4,500
Lee	5	815	1,647
Leon	1	33	33
Levy	61	6,015	6,015
Liberty			
Madison			
Manatee	18	2,360	2,635
Marion	13	800	680
Monroe	13	1,000	1,500
Nassau			
Okaloosa			
Okeechobee			
Orange	4	250	325
Osceola			
Palm Beach	138	27,198	53,882
Pasco	3	105	270
Pinellas	1	25	25
Polk	8	352	507
Putnam			
Santa Rosa	1	90	85
Seminole	42	7,237	8,030
St. Johns	1	86	166
St. Lucie	7	483	660
*Sumter			
Suwannee			
Taylor			
Volusia	1	220	293
Wakulla			
Walton			
Washington			
Totals	596	82,543	\$ 124,716

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	EGG PLANTS		
	Acres	Crates	Value
Alachua	8	1,450	\$ 910
Baker			
Bay			
Bradford			
Brevard	1	75	75
Broward	129	20,495	38,095
Calhoun			
Citrus	4	205	490
Clay			
Columbia			
Dade	48	6,310	9,975
DeSoto	200	22,575	26,650
Duval	3	125	325
Escambia	1	15	19
Flagler			
Franklin	1	40	80
Gadsden			
Hamilton			
Hernando			
Hillsborough	53	6,507	15,701
Holmes	1	26	26
Jackson			
Jefferson			
Lafayette			
Lake	1	100	200
Lee	60	11,108	23,554
Leon	1	40	40
Lery	61	9,110	6,300
Liberty			
Madison			
Manatee	99	50,472	57,062
Marion	11	740	1,150
Monroe			
Nassau			
Okaloosa			
Okeechobee	14	2,208	2,940
Orange	8	1,850	3,600
Osceola	2	500	750
Palm Beach	831	208,833	386,541
Pasco	2	350	670
Pinellas			
Polk	13	1,628	3,158
Putnam			
Santa Rosa			
Seminole	56	16,156	17,735
St. Johns	1	3	9
St. Lucie	7	226	531
*Sumner			
Suwannee			
Taylor			
Volusia	4	560	750
Wakulla			
Walton			
Washington			
Totals	1,016	358,737	\$ 596,336

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	CUCUMBERS		
	Acres	Crates	Value
Alachua	307	38,250	\$ 78,790
Baker			
Bay			
Bradford	1	35	70
Brevard	1	27	54
Broward	89	9,880	15,820
Calhoun			
Citrus	3	875	1,150
Clay			
Columbia			
Dade	4	780	875
DeSoto	75	93,870	103,925
Duval	8	4,735	4,930
Escambia	3	270	197
Flagler			
Franklin	1	80	160
Gadsden			
Hamilton			
Hernando	7	310	675
Hillsborough	118	17,579	29,745
Holmes	5	70	110
Jackson			
Jefferson			
Lafayette	1	80	117
Lake	13	2,719	5,185
Lee	174	1,410	2,263
Leon	1	5	10
Levy	1,129	85,667	38,503
Liberty			
Madison			
Manatee	97	15,366	26,694
Marion	84	12,027	16,812
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange	264	97,818	146,085
Osceola			
Palm Beach	65	11,845	21,244
Pasco	2	150	318
Pinellas	1	125	275
Polk	11	1,280	1,722
Putnam			
Santa Rosa	2	60	116
Seminole	23	4,138	5,803
St. Johns	1	10	30
St. Lucie	2	141	293
*Sumter			
Swansee	1	40	40
Taylor			
Volusia	4	500	630
Wakulla			
Walton			
Washington			
Totals	2,497	350,516	\$ 497,615

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	ROMAINE		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay			
Bradford			
Brevard			
Broward	2	100	100
Calhoun			
Citrus			
Clay			
Columbia			
Dade			
DeSoto			
Duval			
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	3	238	370
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee			
Leon			
Levy			
Liberty			
Madison			
Manatee	2	330	200
Marion			
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange	6	2,532	3,074
Osceola			
Palm Beach			
Pasco			
Pinellas			
Polk	1	40	43
Putnam			
Santa Rosa			
Seminole	16	10,700	6,880
St. Johns			
St. Lucie			
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Totals	30	13,940	\$ 7,653

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18:
Continued.

COUNTIES	WATERMELONS		
	Acres	Canned	Value
Alachua	341	103	\$ 13,950
Baker			
Bay	5	5	280
Bradford	28	14	1,965
Broward	18	1	125
Broward			
Calhoun	57	30	3,090
Citrus	30	14	4,760
Clay	25	22	1,785
Columbia	377	157	5,190
Dade	13	1	700
DeSoto	1,155	415	98,935
Duval	34	22	3,285
Escambia	39	24	2,525
Flagler	12	3	590
Franklin	15	30	1,200
Gadsden			
Hamilton			
Hernando	200	26	8,525
Hillsborough	287	211	71,895
Holmes	166	36	2,593
Jackson	287	102	8,250
Jefferson	100	22	2,850
Lafayette	1	2	200
Lake	946	365	60,284
Lee	212	60	15,905
Leon	436	148	9,920
Levy	520	80	16,493
Liberty			
Madison	16	7	800
Manatee	72	20	5,455
Marion	689	251	54,675
Monroe	29	3	270
Nassau	4	5	712
Okaloosa			
Okaloosa	5	1	400
Orange	448	137	21,640
Osceola	12	6	490
Palm Beach	7	4	1,275
Pasco	30	14	1,930
Pinellas	46	34	3,485
Polk	165	47	16,560
Putnam	44	27	4,415
Santa Rosa	57	22	3,395
Seminole	8	4	1,280
St. John	11	23	1,870
St. Lucie	76	27	2,664
*Sumter			
Suwannee	340	119	14,830
Taylor	145	20	3,000
Volusia	267	72	18,820
Wakulla	12	7	580
Walton			
Washington	50	17	925
Totals	7,558	2,773	\$ 494,636

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	CANTALOUPE		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay	1	45	80
Bradford			
Brevard			
Broward			
Calhoun			
Citrus			
Clay	1	50	100
Columbia			
Dade	2	250	300
DeSoto	3	200	200
Duval	4	204	420
Escambia	1	30	75
Flagler	1	55	65
Franklin	4	750	2,250
Gadsden			
Hamilton			
Hernando			
Hillsborough	18	2,808	8,441
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	3	97	70
Leon	1	57	68
Levy			
Liberty			
Madison			
Manatee	1	30	50
Marion	407	18,292	20,854
Monroe	20	905	800
Nassau			
Okaloosa			
Okeechobee			
Orange	1	50	100
Osceola			
Palm Beach			
Pasco			
Pinellas	1	55	100
Polk	4	100	200
Putnam			
Santa Rosa	5	210	255
Seminole			
St. Johns			
St. Lucie	13	296	472
*Sumter			
Suwannee			
Taylor			
Volusia	2	470	630
Wakulla			
Walton			
Washington			
Totals	502	24,954	41,520

*Not Reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	ENGLISH PEAS		
	Acres	Crates	Value
Alachua	4	100	\$ 270
Baker			
Bay	1	50	41
Bradford			
Brevard			
Broward	40	6,000	10,150
Calhoun			
Citrus			
Clay			
Columbia	3	110	110
Dade			
DeSoto	119	12,554	19,267
Duval			
Escambia	1	3	6
Flagler			
Franklin	1	100	300
Gadsden			
Hamilton			
Hernando			
Hillsborough	10	903	2,709
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	4	113	183
Lee			
Leon	1	20	20
Levy	10	500	500
Liberly			
Madison			
Manatee	1	20	66
Marion	20	550	1,290
Monroe			
Nassau			
Okaloosa			
Okeechobee	6	352	800
Orange	4	110	280
Osceola			
Palm Beach	87	24,869	32,670
Pasco			
Pinellas	1	85	105
Polk	5	205	710
Putnam			
Santa Rosa	6	105	190
Seminole	1	7	14
St. Johns			
St. Lucie	9	464	1,322
*Sumter			
Suwannee			
Taylor			
Volusia	7	470	1,020
Wakulla			
Wallon			
Washington			
Total	341	47,558	\$ 72,083

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	BEETS		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay			
Bradford			
Brevard	1	1,350	1,000
Broward			
Calhoun			
Citrus			
Clay			
Columbia			
Dade	1	30	60
DeSoto	15	2,180	1,380
Duval	3	645	760
Escambia	1	100	100
Flagler	1	125	125
Franklin	1	150	450
Gadsden			
Hamilton			
Hernando			
Hillsborough	10	915	1,718
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	24	1,825	3,250
Lee	1	9	22
Leon	1	30	40
Levy	15	750	750
Liberty			
Madison			
Manatee	23	5,619	7,432
Marion	19	2,710	2,810
Monroe	5	40	60
Nassau	1	30	30
Okaloosa			
Okeechobee	2	348	330
Orange			
Osceola			
Palm Beach	208	45,483	72,606
Pasco	6	840	580
Pinellas	1	60	60
Polk			
Putnam			
Santa Rosa	1	23	20
Seminole	23	8,950	10,200
St. Johns	1	10	20
St. Lucie	7	204	253
*Sumter			
Suwannee			
Taylor			
Volusia	8	1,145	1,335
Wakulla			
Walton			
Washington			
Totals	380	73,571	\$ 105,391

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	BEANS (String)		
	Acres	Crates	Value
Alachua	147	4,761	\$ 21,776
Baker			
Bay	0	518	420
Bradford	19	1,005	1,348
Brevard	74	1,181	2,186
Broward	1,811	317,220	527,655
Calhoun	1	5	10
Citrus	1	94	136
Clay	15	427	867
Columbia			
Dade	227	84,354	54,360
DeSoto	237	172,435	180,500
Duval	18	1,528	1,886
Escambia	1	50	50
Flagler			
Franklin	1	300	900
Gadsden	6	500	500
Hamilton			
Hernando	6	200	250
Hillsborough	370	36,778	95,584
Holmes			
Jackson			
Jefferson			
Lafayette	10	1,927	2,988
Lake	78	5,969	8,700
Lee	11	840	1,558
Leon	1	23	25
Levy	50	5,000	4,000
Liberty			
Madison			
Manatee	47	5,731	8,177
Marion	1,580	112,020	114,141
Monroe			
Nassau	1	90	190
Okaloosa			
Okceehobee	152	15,212	16,092
Orange	22	1,842	2,550
Osceola			
Palm Beach	1,828	540,032	717,435
Pasco	78	1,317	1,081
Pinellas	3	235	420
Polk	242	21,842	30,448
Pulnam	185	0,580	14,930
Santa Rosa	2	50	150
Seminole	74	14,360	17,253
St. Johns	1	28	56
St. Lucie	672	49,286	91,482
*Sumter			
Suwannee	1	5	10
Taylor			
Volusia	25	2,430	3,505
Wakulla			
Walton			
Washington			
Totals	8,006	1,860,136	\$ 1,933,578

*Not reported.

TABLE NO. 2—VEGETABLES AND GARDEN PRODUCTS, 1917-18.
Continued.

COUNTIES	LIMA BEANS		
	Acres	Crates	Value
Alachua			\$
Baker			
Bay			
Bradford	1	2	10
Brevard	104	313	563
Broward	44	7,080	9,515
Calhoun			
Citrus	1	1	60
Clay			
Columbia			
Dade	6	100	300
DeSoto	14	1,400	1,960
Duval	6	129	371
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	83	3,019	4,578
Holmes			
Jackson			
Jefferson			
Lafayette	2	191	381
Lake			
Lee			
Leon			
Levy	5	100	150
Liberty			
Madison			
Manatee			
Marion	1	10	20
Monroe			
Nassau			
Okaloosa			
Okeechobee	16	797	1,300
Orange	1	20	60
Osceola			
Palm Beach	20	4,850	7,450
Pasco	11	347	705
Pinellas			
Polk	3	110	169
Putnam			
Santa Rosa			
Seminole	8	1,574	3,010
St. Johns			
St. Lucie	2	14	31
*Sumter			
Suwannee			
Taylor			
Volusia	2	220	270
Wakulla			
Walton			
Washington			
Totals	329	20,079	\$ 30,909
Totals	320	20,079	\$ 30,900

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.

COUNTIES	ORANGES		
	Bear- ing Trees	Non- Bearing Trees	Trees in Nursery Form
Alachua	25,383		
Baker			
Bay	100	720	
Bradford	203	482	
Brevard	290,643	123,915	169,025
Broward	7,552	5,758	40,000
Calhoun	1,678	995	100
Citrus	7,610	1,552	1,590
Clay	1,056	1,353	27
Columbia	202	52	60
Dade	13,720	10,133	5,800
DeSoto	442,740	290,146	173,482
Duval	13,914	1,450	243
Escambia	718	2,597	2,706
Flagler	1,172	128	
Franklin	1,285	1,283	
Gadsden			
Hamilton			
Hernando	18,040	3,285	11,800
Hillsborough	268,009	272,963	121,420
Holmes	20	79	
Jackson			
Jefferson			
Lafayette	591	1,072	82
Lake	104,179	114,549	232,180
Lee	156,695	79,411	43,264
Leon	27	31	
Levy	1,365	337	
Liberty	79	495	
Madison			
Manatee	170,729	76,450	115,790
Marion	91,597	45,121	61,408
Monroe	585	205	65
Nassau	6	45	
Okaloosa	24	146	
Okeechobee	4,920	1,107	1,280
Orange	430,529	310,463	141,090
Osceola	45,677	13,627	4,377
Palm Beach	49,925	50,443	10,580
Pasco	53,036	67,185	35,025
Pinellas	141,270	73,910	31,300
Polk	309,519	583,451	228,387
Putnam	224,376	21,805	36,510
Santa Rosa	2,204	661	3,000
Seminole	89,936	21,636	21,130
St. Johns	6,379	1,312	116
St. Lucie	81,658	117,090	152,246
*Sumter			
Swannee	200		
Taylor	28	44	
Volusia	329,850	148,760	53,800
Wekiva	8	19	
Walton			
Washington	8	22	
Total	3,567,072	2,452,426	1,719,063

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	ORANGES—Continued		
	Value of All Trees	Crates	Value
Alachua		33,463	\$ 70,420
Baker			
Bay		154	242
Bradford	1,185	148	290
Brevard	292,033	349,025	711,958
Broward	171,828	15,050	31,888
Calhoun	5,755	1,923	3,846
Citrus	4,958	9,750	17,006
Clay	2,172	896	2,188
Columbia	723	214	535
Dade	75,430	19,346	33,989
DeSoto	2,707,032	969,238	1,783,389
Duval	4,580	9,861	44,837
Escambia	552	524	1,514
Flagler	4,082	1,790	3,860
Franklin		8,855	23,130
Gadsden			
Hamilton			
Hernando	53,255	23,787	29,208
Hillsborough	724,957	632,493	1,241,865
Holmes	105	2	3
Jackson			
Jefferson			
Lafayette	1,285	468	929
Lake	60,715	142,275	267,224
Lee	268,793	75,002	131,431
Leon	31	23	44
Levy	6,287	5,750	11,641
Liberty	1,703	69	163
Madison			
Manatee	165,480	169,132	268,712
Marion	120,239	151,576	232,661
Monroe	550	93	310
Nassau	156	11	32
Okaloosa	193	8	18
Okneechee	51,660	8,524	16,919
Orange	68,500	670,303	1,186,366
Osceola	1,446,580	159,138	330,399
Palm Beach	158,820	58,291	117,223
Pasco	182,393	103,281	192,403
Pinellas	14,375	238,040	485,282
Polk	4,897,293	799,457	1,183,966
Putnam		44,579	291,582
Santa Rosa	2,794	144	634
Seminole	820,261	156,282	97,523
St. Johns	1,686	12,570	25,140
St. Lucie	450,056	85,697	209,105
*Sumter			
Suwannee	101		
Taylor	93	46	41
Volusia	125,500	124,815	239,340
Wakulla	83	14	41
Walton			
Washington	22	4	14
Total	2,893,859	5,177,081	9,899,144

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	LEMONS		
	Bear- ing Trees	Non- Bearing Trees	Trees in Nursery Form
Alachua			
Baker			
Bay		20	
Bradford			
Brevard	28	430	
Broward	2,138	771	
Calhoun			
Citrus		3	8
Clay			
Columbia			
Dade	70	654	
DeSoto	441	5,010	8,200
Duval	137	157	28
Escambia			
Flagler			
Franklin	219	107	
Gadsden			
Hamilton			
Hernando			
Hillsborough	11,277	678	59,187
Holmes			
Jackson			
Jefferson			
Lafayette	4	15	2
Lake		1,014	400
Lee	38	41	471
Leon			
Levy		1	
Liberty			
Madison			
Mannatee	103	1,016	9,510
Marion			
Monroe	615	127	
Nassau			
Okaloosa			
Okeechobee	4	0	
Orange			
Osceola			
Palm Beach	1,143	1,234	2,800
Pasco	15	2,115	187
Pinellas	25	2,115	187
Pinellas	32	5	10,000
Polk	12	312	836,550
Putnam			
Santa Rosa			
Seminole		2	
St. Johns			
St. Lucie	824	1,500	15,683
Jackson			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Total	17,098	15,220	942,521

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	LEMONS—Continued		
	Value of All Trees	Crates	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard	1,030	4	4
Broward	27,235	2,386	7,032
Calhoun			
Citrus			
Clay			
Columbia			
Dade	333	49	152
DeSoto	12,710	570	870
Duval	731	90	448
Escambia			
Flagler			
Franklin		537	4,599
Gadsden			
Hamilton			
Hernando			
Hillsborough	19,538	1,440	5,683
Holmes			
Jackson			
Jefferson			
Lafayette	10	5	8
Lake	200		
Lee	490	109	291
Leon			
Levy	3		
Liberty			
Madison			
Manatee	3,692	91	248
Marion			
Monroe		120	225
Nassau			
Okaloosa			
Okeechobee	75	2	10
Orange			
Osceola			
Palm Beach	7,470	2,451	7,325
Pasco	3,745		
Pinellas	1,000	59	152
Polk	84,916	18	32
Putnam			
Santa Rosa			
Seminole	4		
St. Johns			
St. Lucie	3,913	1,207	2,163
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Total	167,495	9,258	29,244

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	LIMES		
	Trees	Crates	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard	217	32	174
Broward	877	454	1,014
Calhoun			
Citrus			
Clay			
Columbia			
Dade	1,582	2,155	5,542
DeSoto	511	519	529
Duval	32	30	108
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	994	1,111	4,159
Holmes			
Jackson			
Lake	5		
Lee	1,868	1,535	0,172
Leon			
Levy			
Liberty			
Madison			
Manatee	14,237	448	1,500
Marion			
Monroe	41,120	3,655	14,824
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach	3,118	4,491	15,634
Pasco	9	2	4
Pinellas	31	53	104
Polk	2,322	5	40
Putnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie	9,025	1,091	2,447
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Total	75,950	15,582	\$53,190

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES.	GRAPEFRUIT		
	Bear- ing Trees	Non- Bearing Trees	Trees in Nursery Form
Alachua	830		
Baker	50		
Bay		50	
Bradford			
Brevard	32,032	16,006	2,725
Broward	13,519	15,329	4,500
Calhoun	20	6	
Citrus	69	15	4
Clay	10	2	3
Columbia			
Dade	881,837	56,394	2,610
DeSoto	65,028	84,287	14,200
Duval	822	68	46
Escambia			
Flagler	65	14	
Franklin	298	103	
Gadsden			
Hamilton			
Hernando	2,201	1,154	600
Hillsborough	23,371	16,866	55,788
Holmes			
Jackson			
Jefferson			
Lafayette	6	9	1
Lake	35,941	65,823	119,000
Lee	132,835	82,828	22,957
Leon			
Levy	1		
Liberty	1	5	
Madison			
Manatee	185,125	74,299	58,150
Marion	3,971	566	
Monroe	1,143	286	20
Nassau			
Okaloosa			
Okeechobee	3,408	666	175
Orange	33,698	71,183	2,400
Osceola	7,451	4,416	3,200
Palm Beach	46,862	42,780	14,973
Pasco	12,565	52,818	17,977
Pinellas	15,591	80,917	37,400
Polk	214,423	678,362	245,765
Putnam	7,180	1,260	
Santa Rosa	1		
Seminole	3,448	357	1,050
St. Johns	147	30	
St. Lucie	117,161	158,544	47,585
*Sumter			
Suwannee			
Taylor	1	2	
Volusia	31,895	9,650	16,500
Wakulla			
Walton			
Washington			
Total	1,893,086	1,493,193	667,620

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	GRAPEFRUIT—Continued		
	Value of All Trees	Crates	Value
Alachua		2,125	4,300
Baker		50	150
Bay			
Bradford			
Brevard	47,688	39,098	73,560
Broward	248,539	36,158	65,650
Calhoun	80	20	40
Citrus	40	120	87
Clay	11		
Columbia			
Dade	209,199	448,423	721,584
DeSoto	172,401	423,676	503,831
Duval	1,778	1,606	5,932
Escambia			
Flagler	155	34	293
Franklin		804	5,864
Gadsden			
Hamilton			
Hernando	8,185	2,264	2,840
Hillsborough	47,168	56,627	115,315
Holmes			
Jackson			
Jefferson			
Lafayette	18	7	29
Lake	45,500	18,346	32,982
Lee	235,407	97,553	257,462
Leon			
Liberty	25	1	2
Madison			
Manatee	189,981	279,883	694,820
Marion	844	8,948	14,340
Monroe	1,200	1,445	4,390
Nassau			
Okaloosa			
Okeechobee	30,103	8,652	14,160
Orange	60,000	51,794	86,424
Osceola	159,119	16,268	35,280
Palu Beach	169,720	82,819	185,622
Pasco	161,377	84,427	92,638
Pinellas	18,150	284,184	426,293
Polk	5,937,625	434,127	926,088
Putnam		10,802	34,700
Santa Rosa	5		
Seminole	35,337	4,182	5,498
St. Johns		274	548
St. Lucie	2,971,507	102,000	356,737
*Sumter			
Swannee			
Taylor	8	2	4
Volusia	7,650	8,185	21,120
Wakulla			
Walton			
Washington			
Total	\$10,778,740	2,560,608	\$4,770,164

*Not reported.

TABLE NO. 3.—FRUIT PRODUCTS.
Continued.

COUNTIES	PINEAPPLES	
	Bnn.	Value
Alachua		
Baker		
Bay		
Bradford		
Brevard		
Broward	200	400
Calhoun		
Citrus		
Clay		
Columbia		
Dade	2,485	4,030
DeSoto	4,750	8,500
Duval	1	5
Escambia		
Flagler		
Franklin		
Gadsden		
Hamilton		
Hernando		
Hillsborough	71	201
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake		
Lee	60	130
Leon		
Levy		
Liberty		
Madison		
Manatee		
Marion		
Nassau		
Okaloosa		
Okeechobee		
Orange	320	1,000
Osceola	1,000	2,500
Palm Beach	59,000	92,975
Pasco		
Pinellas	10	25
Polk		
Putnam		
Santa Rosa		
Seminole		
St. Johns		
St. Lucie	3,408	5,504
*Sumter		
Suwannee		
Taylor		
Volusia		
Wakulla		
Walton		
Washington		
Total	71,535	116,170

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	BANANAS	
	Crates	Value
Alachua		
Baker		
Bay		
Bradford		
Brevard	121	148
Broward	4,343	3,903
Calhoun		
Citrus		
Clay		
Columbia	5	5
Dade	1,822	2,157
DeSoto	25	125
Duval		
Escambia		
Flagler	5	15
Franklin	174	174
Gadsden		
Hamilton		
Hernando	107	175
Hillsborough	2,697	2,726
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake		
Lee	387	560
Leon		
Levy		
Liberty		
Madison		
Manatee	2,677	1,290
Marion	104	624
Monroe	291	155
Nassau		
Okaloosa		
Okeechobee		
Orange		
Osceola	17	35
Palm Beach	7,233	9,676
Pasco		
Pinellas	84	175
Polk	2	2
Putnam		
Santa Rosa		
Seminole		
St. Johns	35	52
St. Lucie	4,265	3,208
*Sumter		
Suwannee		
Taylor		
Volusia		
Wakulla		
Walton		
Washington		
Total	24,447	25,423

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	MANGOES		
	Trees	Crates	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard	8		
Broward	1,680	344	1,387
Calhoun			
Citrus			
Clay			
Columbia			
Dade	11,863	2,446	17,002
DeSoto	746	2,256	4,183
Duval	18	19	49
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	740	642	1,947
Holmes			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	1,379	2,324	392
Leon			
Lake			
Levy			
Liberty			
Madison			
Manatee	760	983	1,270
Marion			
Monroe	224	0	10
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach	14,056	4,344	12,325
Pasco			
Pineillas	55	79	165
Polk	23	5	115
Putnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie	1,878	502	1,018
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Washington			
Total	33,428	18,980	43,391

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	JAPAN PERSIMMONS		
	Trees	Crates	Value
Alachua			
Baker			
Bay			
Bradford	407	309	624
Brevard	156	55	80
Broward	16		10
Calhoun	1	2	4
Citrus	54	27	32
Clay	207	71	135
Columbia	5	5	25
Dade	69		200
DeSoto	191	377	760
Duval	874	1,080	5,036
Escambia	33	6	18
Flagler	7		50
Franklin	120	645	2,580
Gadsden			
Hamilton			
Hernando	18	25	65
Hillsborough	1,134	1,063	3,181
Holmes			
Jackson			
Jefferson			
Lafayette	8	18	31
Lake	193	111	135
Lee	87	109	301
Leon	5	10	4
Levy	9	15	32
Liberty	3	1	3
Madison			
Manatee	79	20	78
Marion			
Monroe			
Nassau			
Okaloosa			
Okeechobee			
Orange	56	56	160
Osceola	5	10	25
Palm Beach	195	116	855
Pasco	120	57	199
Pinellas			
Polk	104	41	207
Putnam	140	158	246
Santa Rosa	3	3	3
Seminole	285	280	312
St. Johns	647	748	1,496
St. Lucie	802	247	547
*Sumter			
Suwannee			
Taylor	4	4	3
Volusia	607	1,253	3,880
Wakulla			
Walton			
Washington			
Total	7,702	7,038	21,418

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	SUGAR APPLES	
	Crates	Value
Alachua		
Baker		
Bay		
Bradford		
Brevard	30	30
Broward	39	97
Calhoun		
Citrus		
Clay		
Columbia		
Dade	52	254
DeSoto		
Duval	21	100
Escambia		
Flagler		
Gadsden		
Hamilton		
Hernando		
Hillsborough	33	79
Holmes		
Jackson		
Lafayette		
Lake		
Lee		
Leon		
Levy		
Liberty		
Madison		
Manatee		
Marion		
Monroe	141	510
Nassau		
Okaloosa		
Okeechobee		
Orange		
Orange		
Osceola		
Palm Beach	228	663
Pasco		
Pinellas		
Polk		
Putnam		
Santa Rosa		
Seminole		
St. Johns		
St. Lucie	3	7
*Sumter		
Suwannee		
Taylor		
Volusia		
Wakulla		
Walton		
Washington		
Total	547	1,743

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	AVOCADO PEARS		
	Trees	Crates	Value
Alachua			
Baker			
Bay			
Bradford			
Brevard			
Broward	11,738	1,278	4,597
Calhoun			
Citrus			
Clay			
Columbia	17	17	34
Dade	5,400	12,786	50,298
DeSoto	123	162	439
Duval			
Escambia			
Flagler			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	960	1,197	3,519
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake	5		
Lee	903	965	317
Leon			
Levy			
Liberty			
Madison			
Manatee	1,131	184	701
Marion			
Monroe	784	17	47
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach	13,221	2,660	15,712
Pasco			
Pinellas	207	152	328
Polk	100		350
Putnam			
Santa Rosa			
Seminole			
St. Johns	8	10	22
St. Lucie	4,317	94	544
*Sumter			
Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Total	38,804	19,531	79,768

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	SAFODILLAS	
	Crates	Value
Alachua		
Baker		
Bay		
Bradford		
Brevard		
Broward	48	120
Calhoun		
Citrus		
Clay		
Columbia		
Dade	447	242
DeSoto		
Duval		
Escambia		
Flagler		
Franklin		
Franklin	194	582
Gadsden		
Hamilton		
Hernando		
Hillsborough	53	157
Hillsborough	783	1,401
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake		
Lee	86	240
Leon		
Levy		
Liberty		
Madison		
Manatee		
Manatee	758	773
Marion		
Marion	18	30
Monroe	289	697
Nassau		
Okaloosa		
Okeechobee		
Orange		
Osceola		
Palm Beach	268	861
Pasco	20	60
Pinellas		
Polk		
Putnam		
Santa Rosa		
Seminole		
St. Johns		
St. Lucie	37	153
St. Lucie	1,235	1,797
*Sumter		
Swannnee		
Taylor		
Volusia		
Wakulla		
Walton		
Washington		
Total	1,248	2,580

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	GUAVAS	
	Crates	Value
Alachua		
Baker		
Bay		
Bradford		
Brevard	85	170
Broward	1,798	2,322
Calhoun		
Citrus		
Clay		
Columbia		
Dade	2,276	2,514
DeSoto		
Duval	82	238
Escambia		
Flagler		
Gadsden		
Hamilton		
Hernando		
Holmes		
Jackson		
Jefferson		
Lafayette		
Lake		
Lee	5,395	10,823
Leon		
Levy		
Liberty		
Madison		
Monroe	50	89
Nassau		
Okaloosa		
Okeechobee	276	1,414
Orange		
Osceola		
Palm Beach	6,489	10,072
Pasco	14	26
PineHaw	148	293
Polk	6	15
Putnam	76	182
Santa Rosa		
Seminole		
St. Johns	7	15
Sumter		
Suwannee		
Taylor		
Volusia		
Wakulla		
Walton		
Washington		
Total	19,739	32,871

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	COCOANUTS		
	Trees	Nuts	Value
Alachua			
Baker			
Bay			
Bradford			
Broward			
Broward			
Calhoun			
Citrus			
Clay			
Columbia			
Dade	11,896	10,500	318
DeSoto	3	30	3
Duval			
Escambia			
Flagler			
Franklin			
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillborough			
Holmes			
Jackson			
Jefferson			
Lafayette			
Lake			
Lee	88	1,800	805
Leon			
Levy			
Liberty			
Madison			
Manatee			
Marion			
Monroe	1,218	9,270	282
Nassau			
Okaloosa			
Okeechobee			
Orange			
Osceola			
Palm Beach	11,462	48,720	3,222
Pasco			
Pinellas			
Polk			
Putnam			
Santa Rosa			
Seminole			
St. Johns			
St. Lucie	1,093	1,368	217
*Sumter			
*Suwannee			
Taylor			
Volusia			
Wakulla			
Walton			
Washington			
Total	25,760	71,688	4,847

*Not reported

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	STRAWBERRIES		
	Acres	Quarts	Value
Alachua			
Baker			
Bay	1	100	50
Bradford	107	368,707	37,363
Brevard	1	300	76
Broward	4	28,500	7,100
Calhoun			
Citrus			
Clay	3	2,220	438
Columbia			
Dade	7	18,000	6,750
DeSoto	8	7,580	1,898
Duval	10	1,150	3,150
Escambia	1	400	50
Flagler	3	1,100	275
Franklin			
Gadsden			
Hamilton			
Hernando			
Hillsborough	310	872,908	852,326
Holmes	1	5	5
Jackson			
Jefferson			
Lafayette			
Lake	2	350	90
Lee	1	600	150
Leon	1	200	50
Levy			
Liberty			
Madison			
Manatee	12	13,000	3,280
Marion			
Monroe			
Nassau	1	300	80
Okaloosa			
Okeechobee			
Orange	12	54,470	4,200
Osceola	3	7,400	1,800
Palm Beach	4	1,575	1,167
Pasco	9	11,775	1,235
Pinellas	8	8,780	2,710
Polk	213	358,951	87,898
Putnam	2	2,950	500
Santa Rosa	1	100	60
Seminole	2	2,022	420
St. Johns	8	17,000	2,588
St. Lucie	7	3,218	2,129
Sumter			
Suwannee	2	600	120
Taylor			
Volusia	80	43,150	14,895
Wakulla			
Walton			
Washington			
Total	874	1,803,389	532,289

*Not reported

TABLE NO. 2—FRUIT PRODUCTS.
Continued.

COUNTIES	PECANS				
	Bearing	Non-Bearing	Value of All Trees	Bush-els	Value
Alachua	9,107	1,465	2,400	3,158	20,560
Baker	..	344	..	..	..
Bradford	4,347	5,691	19,482	1,924	21,333
Brevard	338	23	1,574	7	50
Broward	5	11	175	..	..
Calhoun	188	1,122	4,915	259	1,036
Citrus	271	427	2,558	32	298
Clay	497	834	1,470	200	2,068
Columbia	2,697	4,378	11,717	1,800	15,246
Dade	4	..	10	..	..
DeSoto	98	28	40	106	210
Duval	7,245	9,200	24,425	4,201	40,205
Escambia	3,204	27,766	20,889	963	9,525
Flagler	118	490	520	..	1,010
Franklin	151	288	..	302	1,510
Gadsden	346	106	179	835	3,489
Hamilton	982	1,586	2,224	432	6,137
Hernando	235	1,134	215	48	563
Hillsborough	1,466	7,077	532	3,376	10,585
Holmes	170	763	1,234	154	1,095
Jackson	10,335	29,297	104,270	2,202	22,050
Jefferson	..	..	..	..	..
Lafayette	922	958	1,896	351	1,598
Lake	151	340	978	70	350
Lee	25	84	40	70	548
Leon	5,789	84,123	196,633	4,820	23,925
Levy	3,542	1,535	20,259	2,358	9,880
Liberty	285	460	2,135	329	985
Madison	100	21	250	75	900
Manatee	46	288	565	5	4
Marion	205	2,415	5,324	685	4,828
Monroe	..	..	..	..	..
Nassau	2,492	3,202	11,643	2,099	10,432
Okaloosa	2,501	5,246	8,277	274	1,223
Okeechobee	..	16	2,000	..	..
Orange	931	1,411	1,500	332	3,047
Osceola	..	..	..	..	..
Palm Beach	..	..	..	..	..
Pasco	169	1,675	2,486	57	1,103
Pinellas	115	118	500	15	135
Polk	179	314	2,251	48	575
Putnam	4,334	2,774	..	273	2,809
Santa Rosa	2,911	2,551	0,395	1,070	5,467
Seminole	91	80	1,345	26	267
St. Johns	656	77	87	1,385	24,603
St. Lucie	32	434	1,018	43	276
Sumter	..	..	..	..	..
Suwannee	806	690	7,460	222	1,418
Taylor	50	117	189	97	329
Volusia	3,230	2,478	2,200	940	4,700
Wakulla	128	1,140	3,200	183	580
Walton	57	3,058	6,660	6	30
Washington	1,328	3,862	4,701	621	4,815
Totals	96,745	212,848	\$402,588	38,058	\$295,534

*Not Reported.

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TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	PEARS			
	Bear- ing Trees	Non- Bearing Trees	Barrels	Value
Alachua	530		515	535
Baker	40		45	80
Bay	60	530	22	66
Bradford	187	91	217	651
Brevard	27	111	33	116
Broward				
Calhoun	33		78	168
Citrus	271	47	514	1,934
Clay	907	494	501	1,415
Columbia	182	412	1,332	3,447
Dade				
DeSoto	0		13	65
Duval	2,551	1,319	2,437	12,418
Escambia	2,432	1,671	744	2,580
Flagler	3			10
Franklin	790	330	1,502	6,358
Gadsden				
Hamilton	35	47	87	174
Hernando	176	59	268	1,025
Hillsborough	788	4,278	657	2,249
Holmes	55	140	104	58
Jackson				
Jefferson		22		
Lafayette	757		433	635
Lake	751	23,545	478	1,437
Lee				
Leon	4,285	295	2,280	4,622
Levy	2,895	70	3,146	3,593
Liberty	20	49	52	169
Madison				
Manatee	4	3	4	18
Marion	2,864	647	3,694	6,436
Monroe				
Nassau	1,001	452	970	2,908
Okaloosa	214	179	55	287
Okeechobee	18		30	40
Orange	47	65	27	96
Osceola				
Palm Beach				
Pasco	1,166	519	1,035	2,875
Pinellas	89	13	53	153
Polk	70	16	38	206
Putnam	600	417	583	987
Santa Rosa	294	184	125	769
Seminole	137	54	125	261
St. Johns	190	12	178	538
St. Lucie		55		
*Sumter				
Swansee	13	7	11	94
Taylor				
Volusia	1,118	449	680	1,890
Wakulla	727	24	771	2,313
Walton				
Washington	104	119	97	201
Total	26,523	36,334	24,044	63,967

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	PEACHES			
	Bear- ing Trees	Non- Bearing Trees	Bushels	Value
Alachua	222	154	210	314
Baker	323	182	490	3,370
Bay	84	368	85	95
Bradford	1,307	3,983	946	1,801
Brevard	333	102	86	222
Broward	20	18	10	30
Calhoun	1,373	71	1,432	2,864
Citrus	1,433	944	4,132	2,690
Clay	4,034	1,640	4,888	7,856
Columbia	3,489	724	2,445	6,062
Dade	60	.....	.....	100
DeSoto	320	40	346	976
Duval	3,840	1,692	4,678	18,488
Escambia	7,078	704,096	3,080	6,288
Flagler	170	08	80	460
Franklin	1,685	991	3,370	13,480
Gadsden	296	54	211	340
Hamilton	448	173	583	1,139
Hernando	608	62	1,310	2,474
Hillsborough	8,081	2,312	0,078	19,354
Holmes	921	500	1,303	1,648
Jackson	31	4	152	518
Jefferson . . . . .	.....	.....	.....	.....
Lafayette	2,089	1,370	5,863	2,267
Lake	15,106	45,501	10,354	10,575
Lee	12	.....	9	26
Leon	5,739	742	5,634	10,897
Levy	4,406	1,643	2,720	5,354
Liberty	1,548	579	1,752	2,968
Madison . . . . .	.....	.....	.....	.....
Manatee	517	315	91	229
Marion	2,174	29,636	2,864	5,463
Monroe . . . . .	.....	.....	.....	.....
Nassau	2,430	1,234	3,668	7,257
Okaloosa	3,503	4,642	2,771	3,990
Okeechobee . . . . .	.....	.....	.....	.....
Orange	1,973	2,260	1,034	1,746
Osceola	205	.....	215	324
Palm Beach	21	3	3	16
Pasco	4,140	3,066	3,706	7,897
Pineellas	595	96	280	904
Polk	2,851	896	2,623	10,429
Putnam	7,922	240	3,923	7,029
Santa Rosa	941	604	458	1,227
Seminole	390	94	202	567
St. Johns	4,542	1,075	4,600	9,200
St. Lucie	167	383	45	129
*Sumter . . . . .	.....	.....	.....	.....
Suwannee	61	.....	77	139
Taylor	205	252	200	734
Volusia	13,708	507	3,066	3,066
Wakulla	2,066	507	3,066	3,066
Walton	34	.....	17	25
Washington	2,781	1,400	2,842	2,851
Total	120,347	820,096	106,268	202,598

*Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	PLUMS			
	Bear- ing Trees	Non- Bearing Trees	Bushels	Value
Alachua				
Baker	34	10	24	182
Bay	12	112	2	4
Bradford	298	85	264	528
Brevard	35	10	22	26
Broward	2	2	1	4
Calhoun	165		77	154
Citrus	542	62	630	1,107
Clay	386	65	166	375
Columbia	1,542	285	1,185	2,059
Dade		2		
DeSoto	72	30	147	294
Duval	3,130	1,242	4,954	13,803
Escambia	832	646	386	938
Flagler	32	10		65
Franklin	2,418	2,100	7,254	7,254
Gadsden				
Hamilton	128	47	195	255
Hernando	134	1,021	152	296
Hillborough	4,428	51,351	4,048	10,931
Holmes	68	38	70	91
Jackson	4	20	55	55
Jefferson				
Lafayette	876	564	457	681
Lake	62	38	29	34
Lee	2	6	2	6
Leon	1,922	55	1,126	1,260
Levy	1,456	310	894	1,771
Liberty	108	14	25	44
Madison				
Manatee	276	2	688	490
Marion	77	22	124	183
Monroe				
Nassau	584	247	913	956
Okaloosa	420	213	379	264
Okeechobee				
Orange	10	50	4	8
Osceola				
Palm Beach	7	6	24	36
Pasco	2,725	402	2,915	4,080
Pinellas	18	9	11	23
Polk	204	42	152	424
Putnam	130	250	53	114
Santa Rosa	118	205	172	330
Seminole	42	5	92	108
St. Johns	1,320	204	1,133	2,266
St. Lucie	10	85	8	29
*Sumter				
Suwannee				
Taylor	79	58	55	76
Volusia	345	175	307	910
Wakulla	152		51	103
Wilton				
Washington	261	65	188	253
Totals	25,455	60,172	28,544	52,860

— *Not reported.

TABLE NO. 3—FRUIT PRODUCTS.
Continued.

COUNTIES	GRAPES		WINES	
	Pounds	Value	Gallons	Value
Alachua	2,400	110	80	132
Baker	2,537	234		
Bradford	60,490	1,194		
Brevard	1,046	48		
Broward	760	61		
Calhoun	12,280	987		
Citrus	13,608	941		
Clay	24,920	2,002		
Columbia	104,900	4,825		
Dade				
DeSoto				
Duval	112,218	23,454	130	257
Escambia	9,411	1,334	245	342
Flagler	1,500	45		
Franklin	78,900	6,312		
Gadsden	300	15		
Hamilton	10,300	286	13	20
Hernando	185	35		
Hillsborough	84,602	15,415		
Holmes	6,940	1,032		
Jackson				
Jefferson				
Lafayette	7,780	1,155		
Lake	1,670	178		
Lee	1,876	379		
Leon	18,550	371		
Levy	18,420	2,066		
Liberty	15,210	571		
Madison				
Manatee	850	46		
Marion	17,675	938	20	20
Monroe	1,502	150		
Nassau	44,920	2,238		
Okaloosa	51,280	1,731		
Okeechobee	100	3		
Orange	900	45		
Osceola	410	114		
Palm Beach	1,178	223		
Pasco	8,338	813	105	410
Pinellas	430	40		
Polk	5,677	758		
Pulnam	37,200	1,488		
Santa Rosa	1,917	572	12	34
Seminole	6,353	426		
St. Johns	175,625	17,563		
St. Lucie	6,689	890		
*Sumter				
Suwannee				
Taylor	150	86		
Volusia	57,850	2,907		
Wakulla	15,700	688	5	10
Walton				
Washington	12,510	1,253		
Totals	1 047,830	96,881	610	1,225

*Not reported.

TABLE NO. 3.—FRUIT PRODUCTS. (Continued.)

COUNTIES	FIGS			
	Bearing Trees	Non-Bearing Trees	Crates	Value
Alachua	10		50	50
Baker	9		33	200
Bay	28	402	21	11
Bradford	17		5	9
Brevard	15			50
Broward				
Citrus	30	10	111	323
Calhoun	51		149	296
Clay	20		57	157
Columbia	96	15	172	358
Dade				
DeSoto				
Duval	3,417	114	5,020	20,150
Escambia	1,090	35,717	509	2,481
Flagler	4			40
Franklin	729	470	2,916	11,664
Gadsden	6		12	24
Hamilton	42	21	84	115
Hernando				
Hillsborough	1,669	220	1,436	4,253
Jackson	1	3	5	23
Holmes	0		93	107
Jefferson				
LaFayette	69	73	63	154
Lake	10	53	12	31
Lee	6		3	11
Leon	2,509		2,043	2,943
Levy	42	2	89	166
Liberty	45		204	225
Madison				
Manatee	10	1	5	40
Marion	23		18	71
Mourree	61		1	2
Nassau	78	35	247	236
Okaloosa	112		222	139
Okeechobee				
Orange				
Osceola				
Palm Beach	60		37	111
Pasco	80		200	200
Pinellas				
Polk	26	7	13	52
Punta	103	2	264	773
Santa Rosa	10	2	6	58
Seminole	14		6	27
St. Johns	1,207	436	1,765	3,530
St. Lucie	18	622	40	115
*Sumter				
Swannoe				
Taylor	5		5	5
Volusia	1,850	10	2,510	7,530
Wakulla	1		2	6
Walton				
Washington	31		46	53
	18,549	38,305	19,754	56,791

*Not reported.

TABLE NO. 5.—POULTRY AND PRODUCTS.

COUNTIES	POULTRY—All Ages.				EGGS	
	Common Barnyard		All Others		Sold and Used	
	No.	Value Dollars	No.	Value Dollars	Dozen	Value Dollars
Alachua	188,831	65,749	11,019	23,831	277,034	85,288
Baker	38,866	33,852	882	800	191,163	84,372
Bay	11,722	4,368	705	567	10,733	4,002
Bradford	87,126	43,542	651	625	259,378	77,813
Brevard	11,203	9,990	300	400	69,203	30,367
Broward	22,861	22,861			180,731	91,510
Calhoun	34,642	17,318	355	855	68,931	17,287
Citrus	7,495	5,471	47	48	27,922	1,114
Clay	17,330	15,724			40,189	11,630
Columbia	94,852	31,650	1,304	1,304	281,470	94,860
Dade	87,017	89,042			182,839	72,393
DeSoto	79,552	81,161	634	3,866	81,890	42,662
Duval	157,718	213,117	18,704	18,428	542,325	269,881
Escambia	83,724	66,558	1,503	4,277	129,172	44,448
Flagler	6,542	6,815			1,010	224
Franklin	22,012	16,509	762	762	1,697	848
Gadsden	40,061	21,586	5	5	111,795	30,476
Hamilton	62,441	30,310	137	79	99,273	21,832
Hernando	22,854	19,806	210	466	58,904	22,590
Hillsborough	185,827	185,532	85,347	45,887	167,219	851,135
Jackson	201,902	91,022			469,585	122,014
Jefferson	52,155	37,078	160	48	74,590	23,495
LaFayette	39,597	20,670	1,232	1,500	35,239	9,162
Lake	17,451	12,423	3,002	1,764	61,898	25,318
Lee	27,809	24,946	743	850	118,551	53,856
Leon	65,845	34,731	2,193	2,280	187,116	60,794
Levy	38,697	15,880	1,078	1,809	99,076	22,573
Liberty	17,130	6,153	101	100	53,182	8,866
Madison	39,529	19,980			75,177	31,184
Manatee	34,757	25,554	75	50	57,373	25,046
Marion	76,711	41,272	1,266	1,414	139,806	42,085
Monroe	720	65	20	125		
Nassau	10,774	5,617	7,950	8,194	53,890	19,933
Okaloosa	40,285	20,868			159,979	49,583
Oklawaha	4,968	4,627	50	250	10,731	4,306
Orange	56,364	48,280	509	1,035	387,756	155,200
Osceola	36,218	23,759	90	305	299,492	181,328
Palm Beach	60,416	58,621	2,272	3,455	68,039	33,822
Pasco	46,107	46,107	640	640	239,302	80,843
Pinellas	26,946	26,008	451	985	193,332	81,731
Polk	124,719	103,075	926	807	442,568	166,758
Putnam	55,435	42,340	754	2,100	554,350	221,740
Santa Rosa	26,933	17,991	213	240	53,610	20,818
Seminole	18,547	17,142	4,705	7,981	44,637	46,909
St. Johns	86,125	43,883	465	393	523,060	20,530
St. Lucie	29,738	30,306	665	1,306	167,369	69,200
*Sumter						
Swannee	67,523	35,885			70,155	22,622
Taylor	16,961	8,453	150	90	10,798	3,176
Volusia	66,510	62,445	11,073	13,862	401,335	83,300
Wakulla	23,332	11,166	237	237	116,325	34,342
Walton	38,912	22,042			55,381	20,343
Washington	50,883	23,309	100	50	136,221	32,750
Totals	2,825,298	1,976,638	164,895	151,570	8,290,726	3,865,035

*Not reported.

TABLE NO. 6.—DAIRY PRODUCTS.

COUNTIES	MILK		BUTTER		CHEESE	
	Sold and Used		Sold and Used		Sold and Used	
	Gallons	Value Dollars	Pounds	Value Dollars	Pounds	Value Dollars
Alachua	1,111,190	291,330	163,160	72,949		
Baker	0,455	5,850		500		325
Bay	30,600	6,093	5,936	2,173		
Bradford	86,580	34,632	20,090	10,045		
Brevard	60,002	71,017	400	200		
Broward	97,000	43,190	7,450	3,165		
Calhoun	47,922	18,978	17,964	7,181		
Clats	61,573	41,281	13,219	6,751		
Clay	12,584	4,024	1,027	515		
Columbia	160,640	48,992	63,240	31,620		
Dade	56,811	28,392				
DeSoto	7,590	1,800		307		
Duval	1,597,739	763,366	1,646	823		
Escambia	419,004	139,974	7,891	3,241		
Flagler	1,650	395	200	100		
Franklin	368	184		92		
Gadsden	125,085	43,841	33,740	13,642		
Hamilton	177,390	67,118	31,175	9,724		
Hernando	14,310	12,050	1,000	640		
Hillsborough	2,251,178	1,036,588	293,618	141,748	700	210
Holmes	183,553	45,921	51,105	12,628	14	4
Jackson	257,017	82,807	149,245	50,215		
Jefferson	18,710	5,668	1,564	644		
LaFayette	19,380	6,813	10,887	5,148		
Lake	92,010	41,428	22,334	10,763		
Lee	207,657	95,078	25,269	13,210		
Leon	385,188	114,509	166,815	77,832		
Levy	25,880	9,825	6,995	2,073		
Liberty	27,765	9,877	7,840	3,532		
Madison	5,000	2,600	4,600	1,880		
Manatee	258,200	85,370	15,111	7,539		
Marion	193,775	57,500	41,731	14,622		
Monroe						
Nassau	67,525	27,278	6,464	3,247		
Okaloosa	205,155	90,204	118,375	37,656		
Oklawaha	17,915	10,596	910	537		
Orange	504,945	255,890	55,830	27,845		
Osceola	791,240	101,872	48,660	25,623		
Palm Beach	205,700	77,822	7,190	2,895		
Pasco	297,484	99,907	27,350	21,378		
Pineellas	197,950	101,989	11,467	5,745		
Polk	450,360	238,874	39,554	22,472		
Putnam	233,300	110,650	54,060	21,864		
Santa Rosa	75,070	27,110	23,685	9,900		
Seminole	115,207	57,974	10,754	5,590		
St. Johns	674,155	232,471	43	23		
St. Lucie	146,909	70,311	21,046	9,066	504	69
*Sumter						
Suwannee	15,418	8,679	265	120		
Taylor	855	221	62	31		
Volusia	885,850	442,925				
Wakulla	36,550	14,070	6,500	2,640		
Walton	130,077	56,517	31,334	10,509		
Washington	170,001	38,233	30,556	11,953		
Total	113,292,040	5,282,355	1,661,363	734,658	1,217	283

*Not reported.

TABLE NO. 7.—MISCELLANEOUS PRODUCTS.

COUNTIES	HONEY			BEESSWAX ^a	
	Stands of Bees	Pounds	Value Dollars	Pounds	Value Dollars
Alachua	184	3,758	1,888		
Baker	112	1,020	725		
Bay	190	520	144	200	55
Bradford	336	5,000	1,000	550	1,100
Brevard	239	6,095	1,895		
Broward	492	6,755	1,807		
Calhoun	1,977	80,540	4,999	1,489	537
Citrus	65	429	122	15	6
Clay	116	1,730	263		
Columbia	753	11,180	2,300	240	77
Dade	495	16,050	3,020		
DeSoto	344	10,415	1,085		
Duval	59	865	384	170	68
Escambia	1,515	11,825	1,307	456	150
Flagler	45	1,865	370		
Franklin	2,351	117,550	10,983	588	255
Gadsden	276	2,982	372	102	36
Hamilton	603	1,684	196	30	7
Hernando	53	917	221		
Hillsborough	527	41,430	8,355	115	48
Holmes	704	4,025	739	431	108
Jackson	54	424	73	40	11
Jefferson	40	800	100	100	30
LaFayette	238	3,610	509	243	141
Lake	434	16,048	3,189	1,025	295
Lee	386	22,258	7,267	439	108
Leon	1,165	34,340	6,332	335	220
Levy	307	5,887	898	40	4
Liberty	2,101	91,209	10,096	2,049	644
Madison					
Manatee	1,598	60,082	10,701	20	4
Marion	504	3,827	676	74	41
Monroe	8	400	80		
Nassau	188	4,075	79	20	4
Okaloosa	682	7,150	992	412	121
Okeechobee	186	4,585	814		
Orange	514	19,680	3,302		
Osceola					
Palm Beach	1,007	21,126	7,656	500	200
Pasco	452	7,002	1,342		
Pinellas	778	14,866	2,960	135	48
Polk	410	26,554	1,412		
Putnam	687	32,070	3,285	425	210
Santa Rosa	119	2,265	265	50	15
Seminole	948	39,440	5,677		
St. Johns	166	3,655	1,064	5	1
St. Lucie	1,210	77,882	13,105	876	382
*Sumler					
Suwannee					
Taylor	41	820	164	30	8
Volusia	2,803	170,180	34,034		
Wakulla	1,026	73,568	6,417	327	300
Walton	361	3,194	467	155	35
Washington	1,101	22,735	2,265		
Totals	31,047	1,077,967	177,746	14,125	5,327

^aNot reported

TABLE NO. 4—LIVE STOCK ON HAND, 1917-18.

COUNTIES.	HORSES	
	(On Hand July 1, 1918.)	
	Number	Value
Alachua.....	3,463	\$ 435,739
Baker.....	395	57,783
Bay.....	177	28,030
Bradford.....	1,828	182,700
Brevard.....	187	21,460
Broward.....	79	13,670
Calhoun.....	459	58,430
Chrus.....	161	18,353
Clay.....	306	29,005
Columbia.....	1,102	161,315
Dade.....	249	40,325
DeSoto.....	2,507	201,960
Duval.....	1,794	224,725
Escambia.....	1,320	131,233
Flagler.....	134	18,495
Franklin.....	81	16,200
Gadsden.....	1,156	146,600
Hamilton.....	676	89,640
Hernando.....	558	65,085
Hillsborough.....	2,921	329,165
Holmes.....	413	41,880
Jackson.....	2,340	268,063
Jefferson.....	600	69,095
La Fayette.....	637	98,700
Lake.....	415	30,750
Lee.....	448	65,900
Leon.....	1,638	223,860
Levy.....	1,094	107,195
Liberty.....	255	29,140
Madison.....	1,332	175,505
Manatee.....	1,137	105,355
Marion.....	3,010	324,925
Monroe.....	.....	.....
Nassau.....	274	36,300
Okaloosa.....	335	35,808
Okeechobee.....	247	23,170
Orange.....	939	109,040
Osceola.....	1,053	208,735
Palm Beach.....	320	53,060
Paaco.....	1,142	162,687
Pinellas.....	302	37,650
Polk.....	1,075	108,215
Putnam.....	1,073	138,704
Santa Rosa.....	567	57,565
Seminole.....	323	32,585
St. Johns.....	1,102	134,440
St. Lucie.....	241	28,170
Sumter.....	.....	.....
Swannsee.....	1,391	172,545
Taylor.....	279	31,356
Volusia.....	1,239	116,940
Wakulla.....	360	44,595
Walton.....	482	49,444
Washington.....	625	69,050
Totals.....	46,923	\$ 5,801,524

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	COLTS	
	(On Hand July 1, 1918.)	
	Number	Value
Alachua.....	276	\$ 24,360
Baker.....	14	1,560
Bay.....	2	100
Bradford.....	87	6,126
Brevard.....	11	1,136
Broward.....	1	150
Calhoun.....	30	2,335
Citrus.....	37	2,165
Clay.....	11	735
Columbia.....	53	5,695
Dade.....		
DeSoto.....	114	5,055
Duval.....	33	2,740
Escambia.....	46	2,800
Flagler.....	2	200
Franklin.....	2	200
Gadsden.....	86	4,840
Hamilton.....	32	1,650
Hernando.....	47	2,085
Hillsborough.....	73	4,050
Holmes.....	17	1,385
Jackson.....	192	15,753
Jefferson.....	18	1,650
La Fayette.....	4	295
Lake.....	8	350
Lee.....	35	2,310
Leon.....	199	13,060
Levy.....	127	6,345
Liberty.....	21	1,480
Madison.....	7	600
Manatee.....	79	3,375
Marion.....	358	20,860
Monroe.....		
Nassau.....	2	200
Okaloosa.....	23	1,555
Okeechobee.....	2	65
Orange.....	31	1,890
Osceola.....	22	1,345
Palm Beach.....		
Pasco.....	63	5,464
Pinellas.....	5	475
Polk.....	47	2,985
Putnam.....	4	800
Santa Rosa.....	32	1,475
Seminole.....	14	635
St. Johns.....	22	1,275
St. Lucie.....	15	1,180
*Sumter.....		
Suwannee.....	38	2,385
Taylor.....	8	715
Volusia.....	18	1,155
Wakulla.....	23	1,165
Walton.....	17	1,125
Washington.....	34	1,855
Totals.....	2,442	\$ 162,927

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES	MULES	
	(On Hand July 1, 1918.)	
	Number	Value
Alachua.....	2,864	\$ 585,721
Baker.....	771	123,637
Bay.....	332	40,195
Bradford.....	1,451	206,420
Brevard.....	170	27,101
Broward.....	410	78,577
Calhoun.....	802	143,100
Citrus.....	129	22,320
Clay.....	217	34,275
Columbia.....	2,027	321,401
Dade.....	457	64,700
DeSoto.....	1,590	326,263
Duval.....	632	117,465
Escambia.....	857	164,781
Flagler.....	241	51,200
Franklin.....	75	18,750
Gadsden.....	1,256	253,387
Hamilton.....	1,356	221,388
Hernando.....	257	47,525
Hillsborough.....	1,183	245,760
Holmes.....	1,172	161,650
Jackson.....	21,849	164,740
Jefferson.....	1,787	286,214
La Fayette.....	680	210,801
Lake.....	491	51,905
Lee.....	370	68,525
Leon.....	1,594	294,560
Levy.....	257	27,550
Liberty.....	264	43,080
Madison.....	1,501	293,345
Manatee.....	503	88,770
Marion.....	1,037	181,750
Monroe.....	.....	.....
Nassau.....	206	34,710
Okaloosa.....	818	122,620
Okeechobee.....	51	10,300
Orange.....	653	123,630
Osceola.....	163	38,320
Palm Beach.....	320	70,755
Pasco.....	243	50,010
Pineellas.....	200	36,125
Polk.....	754	177,780
Putnam.....	693	162,545
Santa Rosa.....	470	67,270
Seminole.....	432	92,155
St. Johns.....	952	237,475
St. Lucie.....	288	50,177
*Sumter.....	.....	.....
Suwannee.....	1,537	260,231
Taylor.....	415	70,725
Volusia.....	1,220	174,315
Wakulla.....	424	75,200
Walton.....	605	129,390
Washington.....	1,040	144,237
Totals.....	60,125	\$ 7,673,128

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	MULE COLTS (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	118	\$ 14,075
Baker.....	6	1,100
Bay.....	30	3,000
Bradford.....	2	350
Brevard.....	1	100
Broward.....	6	415
Calhoun.....		
Citrus.....		
Clay.....	38	4,050
Columbia.....		
Dade.....	8	2,000
DeSoto.....	24	2,235
Duval.....	27	2,200
Escambia.....		
Flagler.....		
Franklin.....	25	2,200
Gadsden.....	26	1,720
Hamilton.....	1	100
Hernando.....	30	2,875
Hillsborough.....	32	3,140
Holmes.....	123	30,040
Jackson.....	22	2,045
Jefferson.....	5	600
La Fayette.....	1	25
Lake.....	14	1,620
Lee.....	2	125
Leon.....	2	250
Levy.....	4	300
Liberty.....	1	50
Madison.....	3	125
Manatee.....	74	7,270
Marion.....		
Monroe.....	8	1,300
Nassau.....	4	325
Okaloosa.....	2	500
Okeechobee.....	10	1,300
Orange.....		
Osceola.....	34	5,905
Palm Beach.....		
Pasco.....	38	5,400
Pineellas.....		
Polk.....	30	2,760
Putnam.....	3	425
Santa Rosa.....	3	225
Seminole.....	1	90
St. Johns.....		
St. Lucie.....	51	3,735
*Sumter.....	14	1,050
Suwannee.....	4	370
Taylor.....	4	300
Volusia.....	9	865
Wakulla.....	11	655
Walton.....		
Washington.....		
Totals.....	851	\$ 109,415

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	ASSES AND JENNETS (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	5	\$ 1,350
Baker.....	4	300
Bay.....	3	650
Bradford.....	9	290
Brevard.....	2	400
Broward.....	4	240
Calhoun.....	7	545
Citrus.....	1	125
Clay.....	7	380
Columbia.....	27	2,380
Dade.....	18	350
DeSoto.....	6	300
Duval.....	1	25
Escambia.....	5	100
Flagler.....	1	300
Franklin.....	10	740
Gadsden.....	3	210
Hamilton.....	4	330
Hernando.....	1	410
Hillsborough.....	7	760
Holmes.....	1	10
Jackson.....	8	628
Jefferson.....	4	650
La Fayette.....	1	125
Lake.....	4	175
Lee.....	2	700
Leon.....	8	375
Levy.....	76	3,480
Liberty.....	1	25
Madison.....	2	550
Manatee.....	2	120
Marion.....	1	25
Monroe.....	4	175
Nassau.....	9	295
Okaloosa.....	5	125
Okeechohee.....	3	400
Orange.....	4	195
Osceola.....	2	300
Palm Beach.....	2	450
Pasco.....	5	340
Pinellas.....	6	375
Polk.....	2	300
Putnam.....	2	450
Santa Rosa.....	2	300
Seminole.....	2	450
St. Johns.....	2	300
St. Lucie.....	2	300
*Sumter.....	2	450
Suwannee.....	2	300
Taylor.....	2	450
Volusia.....	2	300
Wakulla.....	2	450
Walton.....	2	300
Washington.....	2	450
Totals.....	275	\$ 19,483

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	WORK OXEN (No. Yoke on Hand July 1, 1918.)	
	Number	Value
Alachua.....	44	\$ 3,800
Baker.....	68	4,506
Bay.....	364	10,490
Bradford.....	43	1,730
Brevard.....	9	460
Broward.....		
Calhoun.....	236	25,080
Citrus.....	1	50
Clay.....	52	4,070
Columbia.....	35	1,570
Dade.....	70	3,935
DeSoto.....	515	23,685
Duval.....	421	39,150
Escambia.....		
Flagler.....	116	4,840
Franklin.....	157	7,054
Gadsden.....	44	2,785
Hamilton.....	11	810
Hernando.....	119	4,845
Hillsborough.....	110	7,840
Holmes.....	430	13,010
Jackson.....	302	12,907
Jefferson.....	10	850
La Fayette.....		
Lake.....	89	4,160
Lee.....	457	25,130
Leon.....	6	600
Levy.....	75	7,140
Liberty.....	60	4,190
Madison.....	39	1,810
Manatee.....	23	1,000
Marion.....		
Monroe.....	495	21,312
Nassau.....	185	15,520
Okaloosa.....	2	100
Okeechobee.....	4	200
Orange.....	6	435
Osceola.....	13	1,150
Palm Beach.....	177	5,975
Pasco.....	1	100
Pinellas.....	7	625
Polk.....	21	2,525
Putnam.....	347	18,005
Santa Rosa.....		
Seminole.....	9	880
St. Johns.....	8	370
St. Lucie.....		
*Sumter.....	9	320
Swansee.....	34	2,040
Taylor.....	57	4,050
Volusia.....	103	5,135
Wakulla.....	150	15,055
Walton.....	259	15,360
Washington.....		
Totals.....	5,793	\$ 330,234

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	STOCK CATTLE Native Breeds—All Ages. (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	76,404	\$ 2,096,624
Baker.....	29,049	789,750
Bay.....	3,016	37,847
Bradford.....	23,350	467,060
Brevard.....	4,017	84,785
Broward.....	164	15,740
Calhoun.....	10,829	204,920
Citrus.....	3,385	63,730
Clay.....	8,880	158,901
Columbia.....	17,404	230,390
Dade.....	15	135
DeSoto.....	94,917	1,963,445
Duval.....	19,360	305,760
Escambia.....	7,997	189,161
Flagler.....	1,004	24,300
Franklin.....	1,872	84,240
Gadsden.....	6,153	126,384
Hamilton.....	12,173	237,078
Hernando.....	6,878	136,540
Hillsborough.....	25,540	734,029
Holmes.....	8,816	141,832
Jackson.....	22,150	462,221
Jefferson.....	9,129	202,700
La Fayette.....	17,441	325,990
Lake.....	4,171	86,334
Lee.....	30,054	652,828
Leon.....	7,713	86,093
Levy.....	23,239	442,927
Liberty.....	5,890	80,033
Madison.....	10,185	231,045
Manatee.....	37,522	836,064
Marion.....	26,483	503,952
Monroe.....	.....	.....
Nassau.....	9,763	223,386
Okaloosa.....	7,234	188,763
Okeechobee.....	10,555	217,330
Orange.....	14,897	296,895
Osceola.....	91,843	3,060,303
Palm Beach.....	19,758	426,036
Pasco.....	11,080	160,509
Pinellas.....	2,752	61,155
Polk.....	66,038	1,465,948
Putnam.....	17,394	520,140
Santa Rosa.....	9,991	199,104
Seminole.....	7,947	185,690
St. Johns.....	17,085	602,730
St. Lucie.....	17,695	546,392
*Sumter.....	.....	.....
Suwannee.....	7,827	132,799
Taylor.....	8,490	165,349
Volusia.....	47,349	946,950
Wakulla.....	6,755	132,560
Walton.....	11,653	195,220
Washington.....	8,920	160,138
Totals.....	952,026	\$ 21,848,435

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18.—(Continued.)

COUNTIES.	THOROUGHBRED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Hereford and Grades.</i>	
	Number	Value
Alachua.....	354	\$ 35,400
Baker.....	106	10,670
Bay.....	1	50
Bradford.....	3	215
Brevard.....	30	3,000
Broward.....		
Calhoun.....	24	2,520
Citrus.....		
Clay.....		
Columbia.....	57	1,715
Dade.....		
DeSoto.....	10	1,000
Duval.....	1	50
Escambia.....	1	75
Flagler.....		
Franklin.....	15	750
Gadsden.....	1	100
Hamilton.....	12	645
Hernando.....	13	510
Hillsborough.....	33	3,010
Holmes.....	16	6,335
Jackson.....	27	1,040
Jefferson.....	4	375
La Fayette.....	2	175
Lake.....	3	30
Lec.....	0	2,280
Leon.....	137	3,820
Levy.....	2	125
Liberty.....	65	2,190
Madison.....		
Manatee.....	3	150
Marion.....	96	6,680
Monroe.....		
Nassau.....		
Okaloosa.....	7	800
Oklawaha.....		
Orange.....	11	1,100
Osceola.....		
Palm Beach.....	2	200
Pasco.....	12	420
Pinellas.....		
Polk.....	6	340
Putnam.....		
Santa Rosa.....	127	6,010
Seminole.....	1	100
St. John.....		
St. Lucie.....	56	4,835
Sumter.....		
Suwannee.....	35	1,370
Taylor.....	5	250
Volusia.....	3	184
Wakulla.....	4	340
Walton.....	21	1,290
Washington.....	112	5,415
Totals.....	1,487	\$ 110,580

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHBRED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Shorthorn and Grades.</i>	
	Number	Value
Alachua.....	189	\$ 12,200
Baker.....	25	950
Bay.....	1	40
Bradford.....	4	160
Brevard.....	206	4,800
Broward.....	1	150
Calhoun.....	1	30
Citrus.....	1	50
Clay.....	19	950
Columbia.....	6	275
Dade.....	71	7,100
DeSoto.....	52	1,200
Duval.....		
Escambia.....		
Flagler.....		
Franklin.....	3	150
Gadsden.....	5	300
Hamilton.....	6	420
Hernando.....	4	200
Hillsborough.....	3	230
Holmes.....	82	1,250
Jackson.....	3	140
Jefferson.....	1	200
La Fayette.....		
Lake.....	1	75
Lee.....	2	44
Leon.....	88	3,025
Levy.....		
Liberty.....	1	125
Madison.....		
Manatee.....		
Marion.....	465	45,500
Monroe.....		
Nassau.....	14	1,890
Okaloosa.....	1	50
Okeechobee.....	2	300
Orange.....		
Osceola.....	551	7,600
Palm Beach.....		
Pasco.....	24	1,275
Pinellas.....	1	100
Polk.....	27	740
Putnam.....	2	100
Santa Rosa.....	16	830
Seminole.....	3	300
St. Johns.....		
St. Lucie.....	17	1,745
*Santer.....		
Suwannee.....	26	1,500
Taylor.....	11	610
Volusia.....	64	3,150
Wakulla.....		
Walton.....	11	675
Washington.....		
Totals.....	2,009	\$ 160,425

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHbred CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Devon and Grades.</i>	
	Number	Value
Alachua.....		\$.....
Baker.....		.....
Bay.....		.....
Bradford.....		.....
Brevard.....		.....
Broward.....		.....
Calhoun.....	1	75
Citrus.....		.....
Clay.....		.....
Columbia.....	4	276
Dade.....	3	240
DeSoto.....		.....
Duval.....	1	100
Escambia.....		.....
Flagler.....		.....
Franklin.....		.....
Gadsden.....		.....
Hamilton.....		.....
Hernando.....	8	775
Hillsborough.....	7	550
Holmes.....		.....
Jackson.....		.....
Jefferson.....		.....
La Fayette.....		.....
Lake.....		.....
Lee.....	817	32,650
Leon.....	2	25
Levy.....		.....
Liberty.....		.....
Madison.....		.....
Manatee.....		.....
Marion.....		.....
Monroe.....		.....
Nassau.....		.....
Okaloosa.....		.....
Okeechobee.....		.....
Orange.....		.....
Osceola.....		.....
Palm Beach.....		.....
Pasco.....	1	60
Pinellas.....		.....
Polk.....	5	310
Putnam.....		.....
Santa Rosa.....	8	575
Seminole.....		.....
St. Johns.....		.....
St. Lucie.....		.....
*Sumter.....		.....
Suwannee.....		.....
Taylor.....	10	650
Volusia.....		.....
Wakulla.....		.....
Walton.....		.....
Washington.....		.....
Totals.....	867	\$ 36,280

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHBRED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Aberdeen Angus Polled and Grades.</i>	
	Number	Value
Alachua.....	143	\$ 14,250
Baker.....	1	100
Bay.....	80	4,000
Bradford.....	38	4,900
Brevard.....	6	600
Calhoun.....	8	1,600
Citrus.....	5	375
Clay.....	13	1,065
Columbia.....	24	2,400
Dade.....		
DeSoto.....		
Duval.....		
Escambia.....		
Flagler.....		
Franklin.....		
Gadsden.....		
Hamilton.....		
Hernando.....	1	60
Hillsborough.....	2	50
Holmes.....	1	100
Jackson.....		
Jefferson.....	30	1,500
La Fayette.....	1	140
Lake.....	38	2,750
Lee.....		
Leon.....		
Levy.....		
Liberty.....	21	275
Madison.....		
Manatee.....		
Marion.....	326	26,300
Monroe.....		
Nassau.....	6	900
Okaloosa.....	2	212
Okeechobee.....		
Orange.....	4	1,000
Osceola.....	108	9,150
Palm Beach.....		
Pasco.....		
Pinellas.....		
Polk.....	2	200
Putnam.....	31	3,250
Santa Rosa.....	1	50
Seminole.....	69	5,525
St. Johns.....		
St. Lucie.....	8	1,210
*Sumter.....		
Suwannee.....	52	5,200
Taylor.....		
Volusia.....		
Wakulla.....		
Walton.....	1	160
Washington.....		
Totals.....	1,112	\$ 87,792

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHBREDED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Guernsey and Grades.</i>	
	Number	Value
Alachua.....	22	1,000
Baker.....	.....	.....
Bay.....	3	170
Bradford.....	5	270
Brevard.....	21	1,875
Broward.....	.....	.....
Calhoun.....	11	1,075
Citrus.....	.....	.....
Clay.....	8	420
Columbia.....	27	2,700
Dade.....	56	5,210
DeSoto.....	98	3,115
Duval.....	14	1,075
Escambia.....	1	50
Flagler.....	20	1,000
Franklin.....	1	75
Gadsden.....	6	325
Hamilton.....	.....	.....
Hernando.....	50	4,680
Hillsborough.....	41	4,838
Holmes.....	44	1,468
Jackson.....	20	1,120
Jefferson.....	.....	.....
La Fayette.....	6	425
Lake.....	12	426
Lee.....	78	2,110
Leon.....	.....	.....
Levy.....	.....	.....
Liberty.....	3	300
Madison.....	8	690
Manatee.....	24	1,785
Marion.....	.....	.....
Monroe.....	1	75
Nassau.....	4	360
Okaloosa.....	.....	.....
Okcechobee.....	1	100
Orange.....	6	2,000
Osceola.....	7	375
Palm Beach.....	6	590
Pasco.....	214	17,905
Pinelha.....	2	200
Polk.....	4	325
Putnam.....	.....	.....
Santa Rosa.....	20	1,585
Seminole.....	12	1,835
St. Johns.....	.....	.....
St. Lucie.....	140	7,280
*Sumter.....	58	2,825
Suwannee.....	.....	.....
Taylor.....	5	315
Volusia.....	2	75
Wakulla.....	6	475
Walton.....	.....	.....
Washington.....	.....	.....
Totals.....	1,089	\$ 71,098

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHBRED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Jersey and Grades.</i>	
	Number	Value
Alachua.....	8,957	\$ 154,000
Baker.....	25	1,975
Bay.....	59	3,030
Bradford.....	794	35,465
Brevard.....	135	9,360
Broward.....	41	4,850
Calhoun.....	76	3,465
Citrus.....	24	1,525
Clay.....	36	2,480
Columbia.....	94	5,355
Dade.....	668	63,511
DeSoto.....	177	11,854
Duval.....	880	35,250
Escambia.....	520	29,678
Flagler.....	18	605
Franklin.....	31	1,150
Gadsden.....	141	5,885
Hamilton.....	70	4,090
Hernando.....	273	17,820
Hillsborough.....	716	37,365
Holmes.....	18	865
Jackson.....	109	4,355
Jefferson.....	60	3,825
La Fayette.....	28	2,240
Lake.....	262	14,530
Lee.....	222	13,004
Leon.....	3,422	60,380
Levy.....	100	4,950
Liberty.....	155	4,315
Madison.....	215	15,800
Manatee.....	490	37,137
Marion.....	460	27,565
Monroe.....		
Nassau.....	86	6,640
Okaloosa.....	63	3,215
Okeechobee.....	66	7,715
Orange.....	659	22,045
Osceola.....	284	26,575
Palm Beach.....	272	13,729
Pasco.....	464	24,400
Pinellas.....	479	36,550
Polk.....	609	35,230
Putnam.....	148	12,785
Santa Rosa.....	122	5,235
Seminole.....	28	1,700
St. Johns.....	927	57,400
St. Lucie.....	688	45,435
* Sumter.....		
Suwannee.....	403	14,159
Taylor.....	6	450
Volusia.....	465	24,395
Wakulla.....	53	3,075
Walton.....	214	12,400
Washington.....	30	865
Totals.....	25,369	\$ 973,837

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	THOROUGHBRED CATTLE Including Three-Quarter Grades and Up- ward—all ages. (On hand July 1, 1918.) <i>Holstein and Grades.</i>	
	Number	Value
Alachua.....	13	\$ 1,325
Baker.....		
Bay.....		
Bradford.....	24	1,315
Brevard.....		
Broward.....	10	1,075
Calhoun.....	13	805
Citrus.....	1	75
Clay.....	8	680
Columbia.....	12	860
Dade.....	212	30,000
DeSoto.....	3	220
Duval.....	26	1,200
Escambia.....	37	1,600
Flagler.....		
Franklin.....	1	50
Gadsden.....		
Hamilton.....	20	2,105
Hernando.....	1	100
Hillsborough.....	70	4,770
Holmes.....	4	335
Jackson.....	44	1,080
Jefferson.....	2	100
La Fayette.....	1	50
Lake.....	55	4,265
Lee.....	3	210
Leon.....	5	100
Levy.....	2	135
Liberty.....		
Madison.....	40	2,000
Manatee.....	21	740
Marion.....	70	4,800
Monroe.....		
Nassau.....	47	2,830
Okaloosa.....	4	315
Okeechobee.....	2	300
Orange.....		
Osceola.....	2	75
Palm Beach.....	61	6,535
Pasco.....	0	320
Pinellas.....	10	1,005
Polk.....	129	5,615
Putnam.....	15	1,700
Santa Rosa.....	10	685
Seminole.....	1	250
St. Johns.....	367	24,405
St. Lucie.....	20	1,480
*Sumter.....		
Suwannee.....	4	565
Taylor.....	4	100
Volusia.....	62	3,100
Wakulla.....	6	375
Walton.....	2	165
Washington.....	1	50
Totals.....	1,464	\$ 111,574

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	COWS Kept for milk only. (On hand July 1, 1918.)	
	Number	Value
Alachua.....	1,824	\$ 202,787
Baker.....	41	3,770
Bay.....	156	6,490
Bradford.....	205	17,865
Brevard.....	149	31,933
Broward.....	100	10,750
Calhoun.....	186	10,650
Citrus.....	286	10,415
Clay.....	76	3,950
Columbia.....	5,643	68,750
Dade.....	349	37,125
DeSoto.....	162	10,659
Duval.....	3,015	266,387
Escambia.....	1,020	54,780
Flagler.....	144	6,825
Franklin.....	184	18,200
Gadsden.....	706	26,690
Hamilton.....	1,851	67,020
Hernando.....	2	100
Hillsborough.....	4,797	435,145
Holmes.....	1,237	42,310
Jackson.....	20,791	92,074
Jefferson.....	68	3,485
La Fayette.....	1,192	31,758
Lake.....	395	20,760
Lee.....	374	30,223
Leon.....	3,962	113,490
Levy.....	228	9,875
Liberly.....	165	6,640
Madison.....	187	13,835
Manatee.....	496	36,794
Marion.....	1,270	64,120
Monroe.....	202	13,035
Nassau.....	2,057	77,553
Okaloosa.....	1,360	108,190
Okeechobee.....	593	28,220
Orange.....	384	33,060
Osceola.....	660	31,660
Palm Beach.....	586	43,060
Pasco.....	1,003	87,567
Pinellas.....	420	26,010
Polk.....	433	20,605
Putnam.....	372	21,584
Santa Rosa.....	1,052	77,035
Seminole.....	369	28,115
St. Johns.....	79	3,855
St. Lucie.....	4	160
*Sumter.....	1,208	88,587
Suwannee.....	34	1,510
Taylor.....	1,691	34,974
Volusia.....	1,788	31,345
Wakulla.....		
Walton.....		
Washington.....		
Totals.....*	64,041	\$ 2,542,446

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year, All Ages—1917-18. Purchased.	
	Number	Value
Alachua.....	2,428	\$ 42,987
Baker.....	2,672	24,750
Bay.....	141	2,306
Bradford.....	1,870	51,007
Brevard.....	100	2,500
Broward.....		
Calhoun.....	1,804	35,669
Clarus.....	227	4,497
Clay.....	460	9,336
Columbia.....	924	25,760
Dade.....	8	870
DeSoto.....	1,264	27,280
Duval.....	116	2,790
Escambia.....	278	6,414
Flagler.....		
Franklin.....	1,834	73,360
Gadsden.....	102	3,437
Hamilton.....	138	2,780
Hernando.....	34	680
Hillsborough.....	965	10,185
Holmes.....	671	16,790
Jackson.....	144	10,820
Jefferson.....	27	324
La Fayette.....		
Lake.....	2,209	44,700
Lee.....	328	85,875
Leon.....	1,392	10,043
Levy.....	166	3,442
Liberty.....	760	13,260
Madison.....	40	1,000
Manatee.....	0	230
Marion.....	727	22,900
Monroe.....		
Nassau.....	72	1,320
Okaloosa.....	380	9,461
Oklawaha.....		
Orange.....	130	3,460
Ocala.....	3,615	100,535
Palm Beach.....	230	2,400
Pasco.....	178	4,518
Pineellas.....	401	12,740
Polk.....	2,026	47,518
Putnam.....	1,057	30,785
Santa Rosa.....	861	30,015
Seminole.....	438	9,295
St. Johns.....	2,200	68,000
St. Lucie.....	5,293	131,853
*Sumter.....		
Suwannee.....	151	3,064
Taylor.....	65	130
Volusia.....		
Wakulla.....		
Walton.....	113	2,235
Washington.....	437	9,935
Totals.....	39,669	\$ 1,020,755

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year. All Ages—1917-18. Died of Disease.	
	Number	Value
Alachua.....	77	\$ 4,430
Baker.....	1	50
Bay.....	2	170
Bradford.....	277	6,574
Brevard.....	125	2,500
Broward.....	15	1,450
Calhoun.....	144	2,994
Citrus.....	63	1,535
Clay.....	34	295
Columbia.....	20	400
Dade.....	4	400
DeSoto.....	213	4,180
Duval.....	2	155
Escambia.....	31	795
Flagler.....	..	..
Franklin.....	13	760
Gadsden.....	104	2,106
Hamilton.....	239	4,617
Hernando.....	82	1,040
Hillsborough.....	35	2,965
Holmes.....	80	2,666
Jackson.....	208	3,510
Jefferson.....	8	200
La Fayette.....	199	2,080
Lake.....	139	2,710
Lee.....	72	550
Leon.....	125	3,721
Levy.....	126	1,895
Liberty.....	61	1,099
Madison.....	14	840
Manatee.....	18	360
Marion.....	252	4,230
Monroe.....	..	..
Nassau.....	24	635
Ocala.....	50	1,000
Okaloosa.....	..	..
Okeechobee.....	..	..
Orange.....	..	..
Osceola.....	101	3,065
Palm Beach.....	50	500
Pasco.....	308	6,135
Pinellas.....	2	120
Polk.....	401	6,905
Putnam.....	25	625
Santa Rosa.....	90	1,872
Seminole.....	20	700
St. Johns.....	28	545
St. Lucie.....	47	905
*Sumter.....	..	..
Suwannee.....	141	1,582
Taylor.....	259	5,155
Volusia.....	..	..
Wakulla.....	3	35
Walton.....	6	97
Washington.....	125	2,544
Totals.....	4,552	\$ 93,760

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year, All Ages—1917-18. Slaughtered—(For Home Use).	
	Number	Value
Alachua.....	4,518	\$ 133,085
Baker.....	39	3,638
Bay.....	93	1,995
Bradford.....	206	8,604
Brevard.....	525	16,150
Broward.....		
Calhoun.....	500	12,888
Citrus.....	158	3,938
Clay.....	227	6,667
Columbia.....	208	5,075
Dade.....	3	80
DeSoto.....	543	12,770
Duval.....	121	2,975
Escambia.....	116	3,217
Flagler.....	25	750
Franklin.....	1,810	73,600
Gadsden.....	58	1,437
Hamilton.....	330	6,880
Hernando.....	20	603
Hillsborough.....	46,979	618,985
Holmes.....	114	1,692
Jackson.....	252	5,120
Jefferson.....		
La Fayette.....		
Lake.....	229	6,035
Lee.....	604	20,658
Leon.....	1,034	36,321
Levy.....	5	125
Liberty.....	295	6,605
Madison.....		
Manatee.....	24	805
Marion.....	289	11,365
Monroe.....		
Nassau.....	12	390
Okaloosa.....	24	646
Okeechobee.....	10	300
Orange.....	182	5,080
Osceola.....	161	4,835
Palm Beach.....	2,845	18,150
Pasco.....	581	14,181
Pinellas.....	202	6,740
Polk.....	42	1,042
Putnam.....	846	35,760
Santa Rosa.....	412	11,542
Seminole.....	107	3,340
St. Johns.....	2,138	74,925
St. Lucie.....	4,815	129,502
*Sumter.....		
Suwannee.....	1	20
Taylor.....	4	92
Volusia.....		
Wakulla.....	13	286
Walton.....		
Washington.....	17	393
Totals.....	71,872	\$ 1,311,634

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year, All Ages—1917-18. Exported Living.	
	Number	Value
Alachua.....	864	\$ 33,525
Baker.....	.....	.....
Bay.....	27	530
Bradford.....	1,480	13,125
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	2,382	57,981
Citrus.....	33	1,147
Clay.....	.....	.....
Columbia.....	.....	.....
Dade.....	.....	.....
DeSoto.....	12,759	172,580
Duval.....	.....	.....
Escambia.....	9	230
Flagler.....	.....	.....
Franklin.....	58	1,435
Gadsden.....	5	100
Hamilton.....	.....	.....
Hernando.....	2	100
Hillsborough.....	.....	.....
Holmes.....	.....	.....
Jackson.....	63	1,050
Jefferson.....	65	1,500
La Fayette.....	.....	.....
Lake.....	.....	.....
Lee.....	6,313	190,262
Leon.....	6	180
Levy.....	13	242
Liberty.....	200	4,750
Madison.....	.....	.....
Manatee.....	.....	.....
Marion.....	22	600
Monroe.....	.....	.....
Nassau.....	.....	.....
Okaloosa.....	.....	.....
Okcechobee.....	197	4,100
Orange.....	.....	.....
Osceola.....	.....	.....
Palm Beach.....	.....	.....
Pasco.....	13	260
Pinellas.....	.....	.....
Polk.....	793	47,360
Putnam.....	.....	.....
Santa Rosa.....	163	6,063
Seminole.....	.....	.....
St. Johns.....	110	4,650
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Swannee.....	.....	.....
Taylor.....	.....	.....
Volusia.....	.....	.....
Wakulla.....	.....	.....
Walton.....	15	400
Washington.....	445	10,175
Totals.....	25,836	\$ 551,847

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year, All Ages—1917-18. Sold Living—(Local Use).	
	Number	Value
Alachua.....	2,912	\$ 125,708
Baker.....	3,745	83,435
Bay.....	89	1,185
Bradford.....	2,680	70,249
Brevard.....	1,232	27,580
Broward.....	.....	.....
Calhoun.....	926	22,443
Citrus.....	317	7,992
Clay.....	565	13,357
Columbia.....	1,032	23,895
Dade.....	10	510
DeSoto.....	3,959	88,310
Duval.....	78	3,295
Escambia.....	381	9,965
Flagler.....	24	873
Franklin.....	64	2,580
Gadsden.....	750	14,803
Hamilton.....	192	4,250
Hernando.....	162	4,545
Hillsborough.....	958	34,250
Holmes.....	852	21,475
Jackson.....	1,360	20,199
Jefferson.....	628	3,303
La Fayette.....	12	240
Lake.....	235	8,557
Lee.....	584	19,126
Leon.....	723	19,620
Levy.....	949	24,075
Liberty.....	650	16,645
Madison.....	40	2,100
Manatee.....	315	8,650
Marion.....	3,063	74,740
Monroe.....	.....	.....
Nassau.....	42	1,055
Okaloosa.....	1,437	36,512
Okeechobee.....	585	15,676
Orange.....	1,356	39,375
Osceola.....	6,854	170,720
Palm Beach.....	.....	.....
Pasco.....	1,549	12,992
Pinellas.....	15	795
Polk.....	7,148	169,885
Putnam.....	1,020	27,260
Santa Rosa.....	910	29,226
Seminole.....	248	7,400
St. Johns.....	5,388	166,175
St. Lucie.....	1,302	39,033
*Sumter.....	.....	.....
Suwannee.....	569	12,192
Taylor.....	730	11,365
Volusia.....	.....	.....
Wakulla.....	270	7,297
Walton.....	225	3,685
Washington.....	713	18,103
Totals:.....	59,853	\$ 1,523,705

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	CATTLE Movement This Year, All Ages—1917-18. Ded of Exposure to Weather.	
	Number	Value
Alachua.....	21	\$ 630
Baker.....	.....	.....
Bay.....	.....	.....
Bradford.....	575	7,200
Brevard.....	20	200
Broward.....	.....	.....
Calhoun.....	280	4,703
Citrus.....	135	3,445
Clay.....	142	2,924
Columbia.....	251	5,193
Dade.....	.....	.....
DeSoto.....	55	1,100
Duval.....	2	40
Escambia.....	24	495
Flagler.....	3	70
Franklin.....	50	2,000
Gadsden.....	41	950
Hamilton.....	156	2,580
Hernando.....	34	680
Hillsborough.....	105	3,235
Holmes.....	115	1,524
Jackson.....	42	590
Jefferson.....	20	400
La Fayette.....	5	100
Lake.....	23	405
Lee.....	22	220
Leon.....	85	664
Levy.....	403	7,625
Liberty.....	178	2,985
Madison.....	.....	.....
Manatee.....	6	120
Marion.....	366	14,730
Monroe.....	.....	.....
Nassau.....	.....	.....
Okaloosa.....	88	1,780
Okeechobee.....	.....	.....
Orange.....	.....	.....
Osceola.....	10	300
Palm Beach.....	.....	.....
Pasco.....	165	2,687
Pinellas.....	.....	.....
Polk.....	1,127	25,430
Putnam.....	226	6,640
Santa Rosa.....	171	3,429
Seminole.....	162	3,152
St. Johns.....	374	17,515
St. Lucie.....	843	15,754
*Sumter.....	.....	.....
Suwannee.....	3	24
Taylor.....	443	7,160
Volusia.....	.....	.....
Wakulla.....	222	3,390
Walton.....	.....	.....
Washington.....	2	35
Totals.....	8,514	\$ 152,386

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	HOGS Movement This Year, All Ages. (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	58,549	\$ 370,930
Baker.....	18,667	149,287
Bay.....	4,148	40,148
Bradford.....	33,572	280,380
Brevard.....	2,142	15,881
Broward.....	958	21,335
Calhoun.....	31,959	329,895
Citrus.....	4,775	28,625
Clay.....	7,204	30,328
Columbia.....	54,552	182,208
Dade.....	722	11,512
DeSoto.....	421,147	280,147
Duval.....	14,074	151,048
Escambia.....	14,898	73,569
Flagler.....	2,581	12,063
Franklin.....	3,557	28,456
Gadsden.....	40,930	197,912
Hamilton.....	42,209	232,696
Hernando.....	6,456	40,855
Hillsborough.....	41,840	299,065
Holmes.....	46,702	357,242
Jackson.....	89,879	858,700
Jefferson.....	44,370	350,282
La Fayette.....	34,666	230,391
Lake.....	5,792	36,655
Lee.....	4,667	39,470
Leon.....	46,267	341,267
Levy.....	28,736	282,670
Liberty.....	11,880	45,078
Madison.....	43,894	283,597
Manatee.....	11,015	58,059
Marion.....	49,497	383,504
Monroe.....		
Nassau.....	6,853	46,517
Okaloosa.....	15,157	81,524
Okeechobee.....	5,118	18,450
Orange.....	7,069	72,078
Osceola.....	8,179	48,717
Palm Beach.....	14,615	117,497
Pasco.....	22,210	59,200
Pinellas.....	1,732	15,780
Polk.....	29,312	204,420
Putnam.....	20,989	109,208
Santa Rosa.....	24,445	175,445
Seminole.....	2,533	18,556
St. Johns.....	21,623	198,433
St. Lucie.....	2,842	32,271
*Sumter.....		
Suwannee.....	55,195	368,468
Taylor.....	11,624	30,156
Volusia.....	30,802	146,270
Wakulla.....	12,891	180,672
Walton.....	29,070	161,506
Washington.....	32,754	170,861
Totals.....	1,195,481	\$ 8,767,353

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	HOGS Movement This Year, All Ages. Slaughtered for Pork.	
	Number	Value
Alachua.....	6,767	\$ 87,022
Baker.....	5,050	94,840
Bay.....	279	2,744
Bradford.....	3,491	48,235
Brevard.....	224	3,411
Broward.....	42	1,665
Calhoun.....	1,112	16,815
Clats.....	842	3,995
Clay.....	818	6,428
Columbia.....	1,473	12,232
Dade.....	4	80
DeSoto.....	759	23,050
Duval.....	462	7,136
Escambia.....	670	8,537
Flagler.....	13	60
Franklin.....	1,452	11,015
Gadsden.....	233	2,041
Hamilton.....	1,041	12,356
Hernando.....	92	1,190
Hillsborough.....	29,485	281,876
Holmes.....	180	2,057
Jefferson.....	66,281	164,760
Jefferson.....	770	10,169
La Fayette.....	2,088	27,674
Lake.....	311	5,570
Lee.....	1,314	14,188
Leon.....	882	10,800
Levy.....	2,070	33,260
Liberty.....	880	7,802
Madison.....	104	890
Manatee.....	238	2,534
Marion.....	2,250	29,435
Monroe.....	.....	.....
Nassau.....	1,183	18,438
Okaloosa.....	.....	.....
Oklawaha.....	1,548	7,490
Orange.....	752	9,810
Osceola.....	2,099	23,855
Palm Beach.....	568	7,312
Pasco.....	517	6,533
Pine Hills.....	712	10,855
Polk.....	2,831	26,848
Putnam.....	4,148	68,895
Santa Rosa.....	1,043	31,528
Seminole.....	374	6,176
St. Johns.....	6,301	96,350
St. Lucie.....	742	10,926
*Sumter.....	.....	.....
Suwannee.....	831	4,433
Taylor.....	280	5,570
Volusia.....	3,208	42,918
Wakulla.....	491	11,955
Walton.....	108	1,490
Washington.....	.....	.....
Totals.....	158,715	\$ 1,326,195

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	HOGS Movement This Year, All Ages, Slaughtered for Bacon—(Local Use).	
	Number	Value
Alachua.....	17,032	\$ 342,473
Baker.....	8,743	85,891
Bay.....	603	6,234
Bradford.....	13,369	200,769
Brevard.....	1	22
Broward.....	.....	.....
Calhoun.....	4,006	121,505
Citrus.....	1,700	21,152
Clay.....	1,800	22,048
Columbia.....	25,793	314,482
Dade.....	492	.....
DeSoto.....	305	8,830
Duval.....	2,812	5,086
Escambia.....	121	48,010
Flagler.....	5	1,870
Franklin.....	11,925	340
Gadsden.....	13,215	192,508
Hamilton.....	282	169,975
Hernando.....	1,198	7,300
Hillsborough.....	7,767	27,051
Holmes.....	14,746	110,487
Jackson.....	0,409	239,651
Jefferson.....	7,694	235,836
La Fayette.....	471	117,596
Lake.....	7	13,943
Lee.....	10,215	140
Leon.....	4,269	204,359
Levy.....	2,717	58,482
Liberty.....	11,238	43,825
Madison.....	.....	192,405
Manatee.....	12,351	.....
Marion.....	.....	198,601
Monroe.....	555	.....
Nassau.....	7,934	10,692
Okaloosa.....	15	97,911
Okeechobee.....	.....	80
Orange.....	318	.....
Osceola.....	576	7,380
Palm Beach.....	2	.....
Pasco.....	785	55,652
Pinellas.....	2	36
Polk.....	2	52,126
Putnam.....	1,456	65
Santa Rosa.....	108	34,772
Seminole.....	1,150	2,700
St. Johns.....	13	20,320
St. Lucie.....	.....	151
*Sumter.....	12,832	.....
Suwannee.....	2,914	144,575
Taylor.....	3,892	50,170
Volusia.....	350	49,855
Wakulla.....	6,547	57,125
Walton.....	10,983	98,257
Washington.....	.....	146,541
Totals.....	231,968	\$ 3,817,687

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	HOGS Movement This Year. All Ages. Sold Living.	
	Number	Value
Alachua.....	4,902	\$ 50,811
Baker.....	1,866	13,745
Bay.....	320	1,901
Bradford.....	2,112	18,804
Brevard.....	88	222
Broward.....	20	655
Calhoun.....	4,059	46,865
Citrus.....	481	4,302
Clay.....	554	2,415
Columbia.....	2,197	29,202
Dade.....	2	20
DeSoto.....	729	7,290
Duval.....	225	3,228
Escambia.....	406	6,079
Flagler.....	.....	.....
Franklin.....	43	344
Gadsden.....	1,737	25,812
Hamilton.....	1,882	16,823
Hernando.....	335	4,387
Hillsborough.....	2,383	23,378
Holmes.....	1,462	23,184
Jackson.....	7,233	59,168
Jefferson.....	2,884	44,988
La Fayette.....	285	2,445
Lake.....	157	1,442
Lee.....	283	2,445
Leon.....	2,787	35,431
Levy.....	5,663	86,282
Liberty.....	1,634	12,678
Madison.....	2,872	52,858
Manatee.....	101	960
Marion.....	6,966	114,665
Monroe.....	.....	.....
Nassau.....	123	1,621
Okaloosa.....	1,262	10,533
Okeechobee.....	250	2,542
Orange.....	766	11,036
Osceola.....	1,853	12,930
Palm Beach.....	200	2,000
Pasco.....	804	5,505
Pinellas.....	159	1,103
Polk.....	641	4,225
Putnam.....	80	1,380
Santa Rosa.....	968	13,178
Seminole.....	204	1,579
St. Johns.....	634	9,865
St. Lucie.....	510	5,788
*Sumter.....	.....	.....
Suwannee.....	7,313	14,984
Taylor.....	267	1,502
Volusia.....	10,096	86,740
Wakulla.....	495	2,240
Walton.....	354	4,224
Washington.....	3,296	40,445
Totals.....	86,907	\$ 925,950

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	HOGS Movement This Year, All Ages. Died of Disease.	
	Number	Value
Alachua.....	2,385	\$ 11,160
Baker.....	942	1,185
Bay.....	14	74
Bradford.....	4,685	18,759
Brevard.....	41	460
Broward.....	1	25
Calhoun.....	3,045	10,418
Citrus.....	1,352	4,955
Clay.....	482	2,187
Columbia.....	3,986	15,944
Dade.....	130	569
DeSoto.....	50	860
Duval.....	755	3,573
Escambia.....	115	1,570
Flagler.....	40	320
Franklin.....	4,326	17,560
Gadsden.....	2,324	11,023
Hamilton.....	131	705
Hernando.....	2,284	16,705
Hillsborough.....	3,903	15,796
Holmes.....	14,224	48,933
Jackson.....	473	3,238
Jefferson.....	3,520	10,200
La Fayette.....	552	8,062
Lake.....	2,047	2,505
Lee.....	3,041	13,340
Leon.....	3,448	8,863
Levy.....	2,876	9,279
Liberty.....	2,890	17,743
Madison.....	476	2,845
Manatee.....	7,356	37,223
Marion.....	258	2,110
Monroe.....	5,324	20,484
Nassau.....	865	2,534
Okaloosa.....	61	1,060
Oklawaha.....	600	3,444
Orange.....	12	120
Osceola.....	1,288	5,088
Palm Beach.....	34	300
Pasco.....	2,294	20,508
Pinellas.....	514	3,275
Polk.....	628	3,294
Putnam.....	364	2,141
Santa Rosa.....	1,052	15,685
Seminole.....	647	3,450
St. Johns.....	3,901	16,768
St. Lucie.....	745	2,997
*Sumter.....	.....	.....
Swannee.....	.....	.....
Taylor.....	.....	.....
Volusia.....	.....	.....
Wakulla.....	1,417	3,782
Walton.....	.....	.....
Washington.....	3,216	11,053
Totals.....	95,174	\$ 424,096

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP. Movement This Year—Sheep and Lambs. (All Ages, on Hand July 1, 1918.)	
	Number	Value
Alachua.....	1,410	8 7,580
Baker.....	330	2,100
Bay.....	817	2,451
Bradford.....	268	1,740
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	2,871	14,459
Citrus.....	.....	.....
Clay.....	521	2,005
Columbia.....	16	80
Dade.....	8	50
DeSoto.....	949	3,143
Duval.....	1,842	9,188
Escambia.....	3,824	10,234
Flagler.....	4,655	24,375
Franklin.....	.....	.....
Gadsden.....	79	316
Hamilton.....	32	71
Hernando.....	722	3,765
Hillsborough.....	1,206	4,298
Holmes.....	2,977	15,464
Jackson.....	1,914	2,070
Jefferson.....	149	755
La Fayette.....	.....	.....
Lake.....	170	920
Lee.....	.....	.....
Leon.....	555	1,425
Levy.....	31	74
Liberty.....	1,160	3,100
Madison.....	.....	.....
Manatee.....	745	1,295
Marion.....	4,415	15,240
Monroe.....	.....	.....
Nassau.....	1,968	9,145
Okaloosa.....	11,035	50,150
Okeechobee.....	.....	.....
Orange.....	150	1,200
Osceola.....	1,400	3,000
Palm Beach.....	500	2,500
Pasco.....	409	1,910
Piellas.....	.....	.....
Polk.....	1,201	3,005
Pulham.....	80	400
Santa Rosa.....	16,285	44,811
Seminole.....	.....	.....
St. Johns.....	200	1,500
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Suwannee.....	79	878
Taylor.....	805	1,445
Volusia.....	3,405	23,855
Wakulla.....	951	3,804
Wallon.....	6,779	44,885
Washington.....	7,865	38,088
Totals.....	84,213	8 401,166

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Purchased.	
	Number	Value
Alachua.....	.....	\$.....
Baker.....	.....	.....
Bay.....	.....	.....
Bradford.....	.....	.....
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	82	96
Citrus.....	.....	.....
Clay.....	144	561
Columbia.....	.....	.....
Dade.....	.....	.....
DeSoto.....	1,217	4,813
Duval.....	.....	.....
Escambia.....	140	580
Flagler.....	.....	.....
Franklin.....	.....	.....
Gadsden.....	20	80
Hamilton.....	60	140
Hernando.....	.....	.....
Hillsborough.....	313	406
Holmes.....	302	810
Jackson.....	.....	.....
Jefferson.....	.....	.....
La Fayette.....	.....	.....
Lake.....	160	1,280
Lee.....	1	2
Leon.....	.....	.....
Levy.....	.....	.....
Liberty.....	.....	.....
Madison.....	20	160
Manatee.....	.....	.....
Marion.....	17	135
Monroe.....	.....	.....
Nassau.....	.....	.....
Okaloosa.....	157	625
Okeechobee.....	.....	.....
Orange.....	.....	.....
Osceola.....	.....	.....
Palm Beach.....	.....	.....
Pasco.....	208	440
Pineellas.....	.....	.....
Polk.....	.....	.....
Putnam.....	.....	.....
Santa Rosa.....	23	95
Seminole.....	.....	.....
St. Johns.....	.....	.....
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Suwannee.....	.....	.....
Taylor.....	25	100
Volusia.....	.....	.....
Wakulla.....	.....	.....
Walton.....	.....	.....
Washington.....	38	123
Totals.....	2,877	\$ 10,446

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Sold Living.	
	Number	Value
Alachua.....		\$.....
Baker.....	100	300
Bay.....		
Bradford.....		
Brevard.....		
Broward.....		
Calhoun.....	328	2,256
Citrus.....		
Clay.....	48	180
Columbia.....		
Dade.....		
DeSoto.....		
Duval.....	375	1,470
Escambia.....	1,918	12,208
Flagler.....		
Franklin.....		
Gadsden.....	6	12
Hamilton.....	160	860
Hernando.....	35	250
Hillsborough.....	310	700
Holmes.....	500	3,500
Jackson.....		
Jefferson.....		
La Fayette.....		
Lake.....		
Lee.....		
Leon.....		
Lery.....	15	30
Liberty.....		
Madison.....		
Manatee.....	96	288
Marion.....	224	1,132
Monroe.....		
Nassau.....	2	12
Okaloosa.....	840	4,200
Okeechobee.....		
Orange.....		
Osceola.....		
Palm Beach.....		
Pasco.....	25	125
Pinellas.....		
Polk.....	140	560
Putnam.....		
Santa Rosa.....	1,048	5,839
Seminole.....		
St. Johns.....	80	400
St. Lucie.....		
*Sumter.....		
Suwannee.....		
Taylor.....		
Volusia.....		
Wakulla.....		
Walton.....	225	675
Washington.....	37	118
Totals.....	6,512	\$ 35,064

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Slaughtered.	
	Number	Value
Alachua.....	.....	\$.....
Baker.....	.....	.....
Bay.....	10	30
Bradford.....	12	60
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	24	130
Citrus.....	.....	.....
Clay.....	6	24
Columbia.....	.....	.....
Dade.....	.....	.....
DeSoto.....	.....	.....
Duval.....	28	148
Escambia.....	3	15
Flagler.....	.....	.....
Franklin.....	.....	.....
Gadsden.....	3	7
Hamilton.....	.....	.....
Hernando.....	.....	.....
Hillsborough.....	12	36
Holmes.....	13	51
Jackson.....	7	20
Jefferson.....	.....	.....
La Fayette.....	.....	.....
Lake.....	7	48
Lee.....	.....	.....
Leon.....	1	2
Levy.....	9	90
Liberty.....	.....	.....
Madison.....	.....	.....
Manatee.....	.....	.....
Marion.....	51	350
Monroe.....	.....	.....
Nassau.....	.....	.....
Okaloosa.....	.....	.....
Okeechobee.....	.....	.....
Orange.....	.....	.....
Osceola.....	.....	.....
Palm Beach.....	200	1,500
Pasco.....	25	125
PineHarris.....	.....	.....
Polk.....	.....	.....
Putnam.....	.....	.....
Santa Rosa.....	281	701
Seminole.....	.....	.....
St. Johns.....	75	375
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Suwannee.....	.....	.....
Taylor.....	.....	.....
Volusia.....	.....	.....
Wakulla.....	.....	.....
Wallace.....	.....	.....
Washington.....	14	54
Totals.....	781	\$ 3,767

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Died of Disease.	
	Number	Value
Alachua.....	3	\$ 24
Baker.....		
Bay.....		
Bradford.....	7	28
Brevard.....		
Broward.....		
Calhoun.....	28	140
Clarus.....		
Clay.....	6	20
Columbia.....		
Dade.....		
DeSoto.....		
Duval.....		
Escambia.....		
Flagler.....	870	4,910
Franklin.....		
Gadsden.....	21	82
Hamilton.....		
Hernando.....		
Hillsborough.....		
Holmes.....	110	223
Jackson.....	7	21
Jefferson.....		
La Fayette.....		
Lake.....		
Lee.....		
Leon.....	10	41
Levy.....	6	6
Liberty.....	53	70
Madison.....		
Manatee.....	25	75
Marion.....	37	178
Monroe.....		
Nassau.....		
Okaloosa.....	152	717
Okeechobee.....		
Orange.....		
Osceola.....		
Palm Beach.....		
Pasco.....		
Pinellas.....		
Polk.....		
Putnam.....		
Santa Rosa.....	342	465
Seminole.....		
St. Johns.....		
St. Lucie.....		
*Sumter.....		
Swannor.....		
Taylor.....		
Volusia.....		
Wakulla.....		
Walton.....		
Washington.....		
Totals.....	1,658	\$ 7,001

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Killed by Dogs.	
	Number	Value
Alachua.....	.....	.....
Baker.....	50	\$ 320
Bay.....	11	38
Bradford.....	11	55
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	845	4,450
Citrus.....	.....	.....
Clay.....	20	70
Columbia.....	2	8
Dade.....	.....	.....
DeSoto.....	20	100
Duval.....	90	250
Escambia.....	635	2,535
Flagler.....	35	140
Franklin.....	.....	.....
Gadsden.....	50	110
Hamilton.....	12	24
Hernando.....	175	600
Hillsborough.....	75	450
Holmes.....	490	1,524
Jackson.....	25	50
Jefferson.....	.....	.....
La Fayette.....	.....	.....
Lake.....	.....	.....
Lee.....	.....	.....
Leon.....	300	300
Levy.....	.....	.....
Liberty.....	160	357
Madison.....	.....	.....
Manatee.....	100	300
Marion.....	344	894
Monroe.....	.....	.....
Nassau.....	35	175
Okaloosa.....	1,281	5,150
Okeechobee.....	.....	.....
Orange.....	.....	.....
Osceola.....	.....	.....
Palm Beach.....	.....	.....
Pasco.....	280	1,320
Pinellas.....	.....	.....
Polk.....	.....	.....
Putnam.....	.....	.....
Santa Rosa.....	283	1,286
Seminole.....	.....	.....
St. Johns.....	.....	.....
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Suwannee.....	.....	.....
Taylor.....	.....	.....
Volusia.....	.....	.....
Wakulla.....	100	400
Walton.....	7	35
Washington.....	500	2,750
Totals.....	5,996	\$ 24,280

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	SHEEP Movement This Year—Sheep and Lambs. Died of Exposure to Weather.	
	Number	Value
Alachua.....	\$.....
Baker.....
Bay.....
Bradford.....
Brevard.....
Broward.....
Calhoun.....
Citrus.....
Clay.....
Columbia.....
Dade.....
DeSoto.....
Duval.....
Escambia.....	170	860
Flagler.....
Franklin.....
Gadsden.....
Hamilton.....
Hernando.....
Hillsborough.....	1	3
Holmes.....	10	70
Jackson.....
Jefferson.....
La Fayette.....
Lake.....
Lee.....
Leon.....
Levy.....
Liberty.....	5	20
Madison.....
Manatee.....
Marion.....	130	381
Monroe.....
Nassau.....
Okaloosa.....	652	2,671
Okeechobee.....
Orange.....
Osceola.....
Palm Beach.....
Pasco.....	400	800
Pinellas.....
Polk.....
Putnam.....
Santa Rosa.....	693	2,688
Seminole.....
St. Johns.....	10	50
St. Lucie.....
Sumter.....
Suwannee.....
Taylor.....
Volusia.....
Wakulla.....
Walton.....
Washington.....
Totals.....	2,071	\$ 7,443

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	COMMON GOATS All Ages. (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	3,719	\$ 7,693
Baker.....	2,180	6,470
Bay.....	249	440
Bradford.....	4,855	7,287
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	1,994	3,989
Citrus.....	722	1,031
Clay.....	593	1,187
Columbia.....	907	1,247
Dade.....	.....	.....
DeSoto.....	95	350
Duval.....	2,276	6,348
Escambia.....	3,127	3,795
Flagler.....	224	486
Franklin.....	485	1,860
Gadsden.....	892	1,724
Hamilton.....	794	799
Hernando.....	375	1,417
Hillsborough.....	1,888	4,132
Holmes.....	1,352	1,859
Jackson.....	8,931	3,250
Jefferson.....	603	910
La Fayette.....	711	711
Lake.....	47	224
Lee.....	180	900
Leon.....	1,155	2,150
Levy.....	958	1,567
Liberty.....	389	447
Madison.....	258	516
Manatee.....	461	1,252
Marion.....	1,862	3,452
Monroe.....	.....	.....
Nassau.....	1,413	2,920
Okaloosa.....	1,342	1,342
Okeechobee.....	.....	.....
Orange.....	63	63
Osceola.....	100	210
Palm Beach.....	44	290
Pasco.....	1,034	2,148
Pinellas.....	1	4
Polk.....	919	1,382
Putnam.....	784	2,450
Sanla Rosa.....	943	896
Seminole.....	17	85
St. Johns.....	378	987
St. Lucie.....	14	74
*Sumter.....	.....	.....
Suwannee.....	525	656
Taylor.....	421	842
Volusia.....	97	485
Wakulla.....	958	1,906
Walton.....	896	1,914
Washington.....	2,122	2,145
Totals.....	53,998	\$ 88,087

*Not reported.

TABLE NO. 4.—LIVE STOCK ON HAND, 1917-18—(Continued.)

COUNTIES.	ANGORA GOATS All Ages. (On Hand July 1, 1918.)	
	Number	Value
Alachua.....	.....	\$.....
Baker.....	59	150
Bay.....	8	24
Bradford.....	.....	.....
Brevard.....	.....	.....
Broward.....	.....	.....
Calhoun.....	0	150
Citrus.....	.....	.....
Clay.....	57	188
Columbia.....	95	247
Dade.....	.....	.....
DeSoto.....	.....	.....
Duval.....	12	133
Escambia.....	13	71
Flagler.....	.....	.....
Franklin.....	.....	.....
Gadsden.....	.....	.....
Hamilton.....	126	130
Hernando.....	17	125
Hillsborough.....	87	468
Holmes.....	.....	.....
Jackson.....	115	85
Jefferson.....	30	45
La Fayette.....	.....	.....
Lake.....	.....	.....
Lee.....	28	280
Leon.....	171	431
Levy.....	.....	.....
Liberty.....	.....	.....
Madison.....	26	130
Mannatee.....	1	8
Marion.....	51	202
Monroe.....	.....	.....
Nassau.....	61	304
Okaloosa.....	.....	.....
Okeechobee.....	.....	.....
Orange.....	6	40
Osceola.....	.....	.....
Palm Beach.....	.....	.....
Pinasco.....	51	234
Pinellas.....	.....	.....
Polk.....	13	32
Putnam.....	.....	.....
Santa Rosa.....	35	35
Seminole.....	.....	.....
St. Johns.....	.....	.....
St. Lucie.....	.....	.....
*Sumter.....	.....	.....
Suwannee.....	.....	.....
Taylor.....	.....	.....
Volusia.....	.....	.....
Wakulla.....	.....	.....
Walton.....	.....	.....
Washington.....	30	100
Totals.....	1,090	\$ 3,504

*Not reported.

YEAR 1917-18.

Table No. 8—Total Acreages of Crops.

Field Crops, Acres	1,531,338
Vegetable and Garden Products.....	105,645
Total Acreage in Cultivation.....	1,636,983

Table No. 9—Total Value of All Farm Products.

Table No. 1—Field Crops	\$31,145,904
Table No. 2—Vegetables and Garden Products	18,838,149
Table No. 3—Fruit Products	16,381,818

Table No. 4—Live Stock on Hand July 1, 1918, Viz.

Horses	\$ 5,764,451	
Mules	7,782,483	
Milch Cows	2,542,446	
* All Other Cattle	23,670,239	
Other Cattle Shipped	2,075,552	\$62,573,373
* Hogs on Hand	8,767,353	
Other Hogs	11,478,002	
Sheep and Goats	492,847	
Table No. 5—Poultry and Products.....	\$ 5,993,243	
Table No. 6—Dairy and Products	6,017,296	
Table No. 7—Miscellaneous Products	312,992	

Grand Total \$141,262,776

*The total number of hogs for the twelve (12) months would have been 2,164,722, if we could have included the 477,590 butchered and the 591,651 that were shipped out of the counties and the State for market by packers and others. The value of hogs butchered and shipped was for the butchered \$6,069,841, and those shipped \$5,408,161, or a total of \$20,245,355 for hogs alone, including those on hand July 1, 1918.

*There were \$5,689 cattle exported from the counties and State by packers and feeders in and out of the State, valued at \$2,075,552.

U. S. Department of Agriculture,
CLIMATOLOGICAL SERVICE
of the
WEATHER BUREAU

Central Office: Washington, D. C.

FLORIDA SECTION,

Prof. A. J. Mitchell, Meteorologist,
Year 1918.

ANNUAL SUMMARY, CLIMATOLOGICAL SERVICE,
FLORIDA SECTION.

GENERAL SUMMARY.

The cold weather of December, 1917, persisted during January, 1918, the deficiency of 5.2° and the minimum of 11° during the month marking the abnormal thermal condition of the year. These negative conditions were followed by temperature inversions of 6° and 4° during February and March, respectively. The rest of the year conformed more nearly to the normal from a temperature viewpoint, except that July and September were exceptionally cool, October unusually warm, and December quite mild as compared with the normal. The mean annual temperature, 71.3° , was the highest since 1892, except 72.3° in 1911 and 71.5° in 1907. The year averaged not so dry as 1917, the deficiency being 2.10 inches compared with 12.72 inches for the previous year. February was nearly 3 inches drier than usual and April was 3.59

inches too wet. The excess for April was the more marked, as that month is normally one of the driest of the year.

The progress of crop development, as influenced by the several weather elements, was reflected in the somewhat backward growth in January, owing to the low temperature and local drought. The warmth of February and March was favorable, but dry weather continued to be an unfavorable factor. The draught was relieved, however, by quite general and heavy rains in April, although cool nights during April and May retarded the growth of some cotton and corn. The boll weevil appeared during May, but the absence of frequent showers during much of the growing season tended to reduce the damage to cotton from that source. The last quarter of the year was unusually wet, delaying harvesting to some extent. But the absence of the usual frost in November, and occasionally in October, prolonged the growing season to the advantage of cane, sweet potatoes and truck. Citrus fruits matured earlier than usual. The excessive rains during November and December were somewhat unfavorable for the crop as a whole. Some fall seeding was done, and at the close of the year oats were promising in northern and central divisions.

THE WEATHER BY MONTHS.

January.—The cold weather of December continued into January, making it exceptionally cold during the first and second decades. The minimum temperature, 11° , was the record for January. The rainfall averaged about the normal, although droughty conditions continued on the southeast coast at the close of the month. Truck, such as cabbage, lettuce, celery and beans, recovered slowly from the cold of December. Citrus growth was somewhat backward. Plowing began for general crops. And a large acreage was planted to Irish potatoes.

February.—The month gave excessive temperature, and

it averaged the warmest February of record. It was, also, unusually dry, breaking previous records, except 1911, when the average was 0.19 inch. The warm weather favored rapid growth of truck, although it was retarded in some districts by drouthy conditions. Much corn was planted and some cotton. Citrus bloom was irregular, being profuse in some groves and much below the average in other groves—due to insufficient rain.

March.—The warm weather of February continued, practically, throughout the month, as did, also, the more or less widespread drought of February. No frost was reported from any station, the lowest temperature being 38°. Farm work was well advanced, the rains during the last week having improved the condition of the soil. The hulk of the cotton, corn, cane and peanut crops was planted and some early corn was worked. Citrus bloom was not up to the average. Truck shipments were increased during the last part of the month.

April.—There was a reaction from the warm weather of the previous several months to colder, especially from the 11th to 13th, with freezing in interior of north portion and frost locally in the central division. In contrast to a normal April, which is generally dry, the month was one of the wettest of record. Germination was delayed and early cotton and corn were retarded by low temperature, and much cotton was plowed up and planted to corn. Some early corn and cotton were worked. The rain benefited citrus fruits. There was some damage from local hail storms.

May.—May averaged cooler and drier than the normal. Rains were insufficient, except during much of the second and third decades, when showers were frequent in all divisions, except the western. The boll weevil increased with the showers and much cotton was plowed up and land planted to corn and peanuts. Large shipments of tomatoes and Irish potatoes were made and a few peaches

and melons went forward. The setting of sweet potato slips was backward.

June.—Like May, the month was drier than the normal, although showers occurred almost daily in most counties after the first few days. The insufficiency of rain was most pronounced in the western division, where corn was unfavorably affected, but cane, tobacco and peanuts did well on low lands. Cotton, also, was benefited, as the dry weather retarded the weevil activity. A local storm on the 17th in Gadsden County damaged corn, cane, tobacco and timber to the extent of about \$34,000. Pvt. Henry C. Rich, U. S. A., was killed by lightning at Camp Johnston on the 14th.

July.—The monthly mean temperature was 1.2° below the normal, and the rainfall averaged 1.71 inches less than usual. Corn, especially in the western division, was unfavorably affected by the dry weather. Some early planted cotton began to open and picking began; in fact, several bales were ginned during the last week of the month. The dry weather retarded boll weevil activity. Cane, peanuts, castor beans, citrus fruits and sweet potatoes were promising. Most crops were "laid by." Robert Singleton, Titusville, was killed by lightning on the 2nd.

August.—Nearly normal temperatures, except high mid-day temperatures during the forepart of the month, and drier than usual, especially in the Miami section, characterized the weather during August. Cotton picking was generally active and much of the corn crop had matured. Citrus fruits, sweet potatoes, peanuts and castor beans were fair to good, although more rain was needed locally for cane, sweet potatoes and seed beds. Some Irish potatoes were planted. One death resulted from lightning during the month.

September.—The month was cooler than the normal, and it continued relatively dry, as were the several immediately preceding, although showers were frequent in much of the section. Rains were least frequent in the

western division. The chief incidence of the month was the disturbance that passed eastward from the west Gulf coast during the night of the 27th. It approached the coast over Pinellas County, where damage approximating \$250,000 was done and 8 or 10 lives were lost. Much of the cotton, corn and peanut crops were harvested. Citrus fruits did well.

October.—The month was unusually warm and wet, the rainfall exceeding the normal by more than 1 inch and the temperature by about 4 degrees. The average number of rainy days, 12, compares with a normal of about 9. The weather was favorable for sweet potatoes, cane and some truck, but cotton picking was at a disadvantage, and considerable hay was lost as a result of frequent rains. Much corn, velvet beans, peanuts and practically the last of the cotton crop were harvested. Citrus fruits were well advanced toward maturity. The minimum temperature, 50°, was the highest minimum since 1891, and it compares with 25° in October, 1917.

November.—The month was moderately cool on an average, but the lowest temperature, 29°, was the highest for the month during the last ten or fifteen years. The month averaged unusually wet, due to the rain of the last week. The first two decades were draughty to the extent of retarding the growth of truck, and in some instances delaying the seeding oats. The peanut and sweet potato crops were harvested. Cane grinding continued and the shipment of citrus fruits increased.

December.—December averaged 1.5° warmer than usual with an excess of almost an inch of rain, the bulk of which occurred during the last half of the month, although the first two days were featured by general and particularly heavy rains over most of the State. The lowest temperature occurred on the 29th, which was the date of the first killing frost of the season. Otherwise the temperature was mostly mild. Owing to the absence of the usual frosts, truck was generally plentiful over all divisions.

COMPARATIVE ANNUAL DATA FOR FLORIDA.

Year.	Temperature.				Precipitation.	
	Mean	Departure From the Normal.	Highest.	Lowest.	Average.	Departure From the Normal.
1892	70.4	-0.2	101	22	47.99	- 4.42
1893	71.0	+0.4	104	19	53.01	+ 0.60
1894	71.2	+0.6	101	12	52.51	+ 0.10
1895	69.9	-0.7	100	11	45.50	- 6.91
1896	71.0	+0.4	103	20	49.62	- 2.79
1897	71.2	+0.6	104	17	56.69	+ 4.28
1898	70.5	-0.1	102	17	48.36	- 4.05
1899	71.0	+0.4	104	2	53.93	+ 1.52
1900	70.7	+0.1	104	13	61.19	+ 8.78
1901	68.8	-1.8	107	12	58.47	+ 6.06
1902	70.8	+0.2	105	15	51.24	- 1.17
1903	69.8	-0.8	105	17	55.79	+ 3.38
1904	69.9	-0.7	102	20	48.15	- 4.26
1905	70.5	-0.1	103	10	61.43	+ 9.02
1906	70.9	+0.3	101	14	53.76	+ 1.35
1907	71.5	+0.9	102	21	49.15	- 3.26
1908	71.2	+0.6	103	20	48.54	- 3.87
1909	71.1	+0.5	103	16	49.52	- 2.89
1910	69.2	-1.4	102	19	50.88	- 1.53
1911	72.3	+1.7	104	15	47.40	- 5.01
1912	71.1	+0.6	104	21	64.88	+11.61
1913	71.2	+0.7	104	23	48.02	- 6.20
1914	70.3	-0.1	107	19	49.08	- 4.62
1915	70.4	-0.1	105	23	56.30	+ 1.23
1916	71.1	+0.3	102	21	47.10	- 6.26
1917	70.3	-0.7	102	13	41.36	-12.72
1918	71.3	+0.5	106	11	50.09	- 2.10

MONTHLY SUMMARY, 1918.

Month.	Temperature.				Precipitation.		Average Number of Days.				Wind
	State Average.	Departure from Normal.	Highest.	Lowest.	State Average	Departure from Normal.	Rainy. 0.01 inch or More.	Clear.	Partly Cloudy.	Cloudy. Prevailing	Direction.
January	53.9	-5.2	89	11	3.11	+0.27	7	16	9	6	nw.
February	65.9	+6.3	92	25	0.81	-2.80	4	15	9	4	sw.
March	69.8	+4.2	92	58	2.53	-0.62	7	16	10	5	sw.
April	69.1	-0.9	96	28	5.55	+3.59	9	13	10	7	se.
May	75.0	-0.8	97	46	2.43	-1.09	6	18	10	3	e.
June	80.4	+0.0	106	58	5.12	-1.60	11	12	13	5	sw.
July	80.2	-1.2	101	57	5.50	-1.71	12	13	13	5	sw.
August	81.5	+0.2	104	58	5.73	-1.08	12	13	14	4	se.
September	77.6	-1.8	98	44	6.42	-0.70	11	12	12	6	ne.
October	76.6	+3.9	96	53	5.84	+1.42	12	11	11	9	e.
November.....	64.8	-0.4	90	29	3.45	+1.62	6	17	6	7	ne.
December	60.9	+1.5	90	23	3.60	+0.90	8	12	7	12	ne.
Year.....	71.3	+0.5	106	11	50.09	-2.10	105	168	124	73	sw.

KILLING FROSTS, 1918.

STATIONS.	Last in Spring.	First in Autumn.
Northern Division.		
Archer	*	Nov. 14
Bristol	April 12	Nov. 13
Camp Johnston	*	Dec. 29
Carrabelle	*	Dec. 29
Cedar Keys	Jan. 23	Dec. 29
Crescent City	Jan. 24	Dec. 29
Federal Point	Jan. 24	None
Fenholloway	April 12	Nov. 13
Fernandina	Feb. 5	None
Gainesville	Feb. 5	Dec. 29
Hilliard	Feb. 6	*
Jacksonville	Feb. 6	Dec. 29
Jasper	Feb. 6	Dec. 29
Johnstown	Feb. 6	Dec. 29
Lake City	Feb. 6	Dec. 29
Live Oak	Feb. 6	Dec. 29
Macleenny	Feb. 6	*
Madison	April 12	Dec. 29
Middleburg	Feb. 6	Dec. 29
Monticello	Feb. 6	*
Morton's Farm	Feb. 6	Dec. 29
Mount Pleasant	April 12	Nov. 13
Old Town	*	Nov. 14
Quincy	April 12	Nov. 13
St. Augustine	Jan. 24	Dec. 29
Satsuma Heights	Jan. 23	Dec. 29
Switzerland	Feb. 6	Dec. 29
Tallahassee	Feb. 5	Dec. 26
Central Division.		
Bartow	Jan. 24	None
Brooksville (1)	Jan. 24	*
Brooksville (2)	Feb. 5	Dec. 29
Bushnell	*	*
Clermont	Jan. 13	None
DeLand	Jan. 24	Dec. 29
Eustis	Jan. 24	None
Fellsmere	Jan. 24	None
Fort Meade	Jan. 24	None
Fort Pierce	Jan. 2	None
Inverness	*	None
Kissimmee	*	None
Lakeland	Jan. 4	None
Lucerne Park	Jan. 13	None
Malabar	Jan. 5	None
McDonald	Feb. 5	None

KILLING FROSTS, 1918—Continued.

STATIONS.	Last in Spring.	First in Autumn.
Merritts Island.....	Jan. 5	None
New Smyrna.....	Jan. 24	None
Ocala.....	Feb. 6	Dec. 29
Okeechobee.....	*	None
Orange City.....	Feb. 6	Nov. 21
Orlando.....	Jan. 24	None
Pinellas Park.....	Jan. 24	None
Plant City.....	Jan. 24	None
Rockwell.....	*	*
St. Cloud.....	Jan. 24	*
St. Leo.....	Jan. 24	Dec. 29
St. Petersburg.....	Jan. 4	None
Sanford.....	Jan. 24	Dec. 29
Tampa.....	Jan. 4	None
Tarpon Springs.....	Jan. 24	None
Titusville.....	Jan. 24	None
Southern Division.		
Arcadia.....	† Jan. 19	*
Avon Park.....	Jan. 4	None
Boca Grande.....	*	None
Bradentown.....	Jan. 24	None
Davie.....	Feb. 5	None
Fort Lauderdale.....	Jan. 13	None
Fort Myers.....	Jan. 5	None
Griffin.....	Jan. 25	None
Homestead.....	Jan. 4	None
Hypofuxo.....	Jan. 5	Dec. 29
Key West.....	None	None
Long Key.....	None	None
Miami (1).....	Jan. 4	None
Miami (2).....	Jan. 4	None
Moore Haven.....	*	† None
Punta Gorda.....	None	*
Ritta.....	Jan. 24	None
Sand Key.....	None	*
Western Division.		
Apalachicola.....	*	Dec. 3
Bonifay.....	Feb. 5	Dec. 26
DeFuniak Springs.....	April 12	*
Garniers (near).....	April 13	Dec. 2
Marianna.....	April 12	Dec. 26
Molino.....	*	*
Pensacola.....	Jan. 23	Dec. 26
St. Andrews.....	April 11	Dec. 29
Wausau.....	April 13	Nov. 14

* Record incomplete.

† Data incomplete, but this date probably correct.

CLIMATOLOGICAL DATA FOR THE YEAR 1918.

STATIONS.	COUNTIES	Elevation, feet.	TEMPERATURE IN DEGREES FAHRENHEIT					
			Length of Record, years.	Annual Mean.	Highest.	Date.	Lowest.	Date.
Northern Division.								
Archer	Alachua	92	33	....	103	June 2	..	.....
Bristol	Liberty .....	...	9	....	99	Aug. 16	..	Jan. 1
Camp Johnston....	Duval .....	...	1	....	101	Aug. 15	..	.....
Carrabelle	Franklin	10	20	....	101	Aug. 15	..	.....
Cedar Keys	Levy	10	30	....	97	July 23†	23	Jan. 1
Crescent City.....	Putnam	45	20	71.0	103	Aug. 15	22	Jan. 1†
Federal Point.....	Putnam	10	27	71.2	104	Aug. 15	22	Jan. 13
Fenholloway	Taylor	75	12	69.1	103	June 3	15	Jan. 1
Fernandina	Nassau	15	26	69.0	100	Aug. 14	23	Jan. 1
Gainesville	Alachua	176	23	69.8	100	June 3†	18	Jan. 1
Hilliard	Nassau	69	10	69.1	102	Aug. 15	16	Jan. 1
Jacksonville	Duval	222	48	69.2	96	Aug. 15	21	Jan. 1
Jasper	Hamilton	152	17	....	....	.....	..	.....
Johnstown	Bradford	125	20	68.8	99	Aug. 15	17	Jan. 1
Lake City	Columbia	210	35	69.1	106	June 3	16	Jan. 1
Live Oak	Suwannee	109	18	....	....	.....	..	.....

Maccleenny	Baker	125	23	....	...	.....	16	Jan. 1
Madison	Madison	143	19	69.0	103	Aug. 15	17	Jan. 1†
Melrose	Alachua	163	..	....	...	.....	..	.....
Middleburg	Clay	14	18	69.1	100	June 3†	18	Jan. 1
Monticello	Jefferson	207	15	....	...	.....	16	Jan. 1
Morton's Farm.....	Duval	15	3	....	...	.....	19	Jan. 1
Mount Pleasant...	Gadsden	306	13	....	103	June 3	11	Jan. 13
Old Town.....	Lafayette .....	...	1	....	102	June 3†	..	.....
Quincy	Gadsden .....	...	4	67.7	102	June 3†	12	Jan. 13
St. Augustine.....	St. Johns	10	67	69.7	98	Aug. 15	22	Jan. 1
Satsuma Heights...	Putnam	98	11	71.8	99	Aug. 15	21	Jan. 1
Switzerland	St. Johns	14	26	....	100	Aug. 15	..	.....
Tallahassee	Leon	192	32	68.3	101	June 3†	18	Jan. 13†
Central Division.								
Bartow	Polk	115	32	72.3	97	July 26†	25	Jan. 2
Brooksville (1)...	Hernando	126	27	....	...	.....	23	Jan. 4
Brooksville (2)...	Hernando .....	...	7	70.4	100	Aug. 15	22	Jan. 4
Bushnell	Sumter	80	1	....	...	.....	..	.....
Clermont	Lake	105	26	....	...	.....	28	Jan. 2
DeLand	Volusia	27	22	71.9	102	Aug. 15	20	Jan. 4
Eustis	Lake	56	28	72.1	102	June 3†	23	Jan. 2†
Fellsmere	St. Lucie	25	5	....	05	Aug. 15	25	Jan. 2
Fort Meade.....	Polk	125	30	....	100	Aug. 15	23	Jan. 2
Fort Pierce.....	St. Lucie	10	18	74.3	98	June 23	31	Jan. 2
Inverness	Citrus	43	20	....	100	Aug. 15	..	.....
Isleworth	Orange .....	...	..	....	...	.....	..	.....
Kissimmee	Osceola	66	27	....	99	June 3†	26	Jan. 5
Lakeland	Polk	227	4	73.5	96	July 8	30	Jan. 4
Lucerne Park.....	Polk .....	...	7	....	99	Aug. 15	29	Jan. 2

CLIMATOLOGICAL DATA FOR THE YEAR 1916

STATIONS.	COUNTIES	Elevation, feet.	TEMPERATURE IN DEGREES FAHRENHEIT					
			Length of Record, years.	Annual Mean.	Highest.	Date.	Lowest.	Date.
Lynne (near).....	Marion .....	...	...	...	...	...	...	...
Malabar	Brevard	28	27	73.9	101	June 23	28	Jan. 2
McDonald	Orange	176	22	71.8	100	Aug. 15	23	Jan. 2
Merritts Island.....	Brevard	20	36	72.7	94	Aug. 15	31	Jan. 2
New Smyrna.....	Volusia	14	34	70.0	96	July 8	23	Jan. 2
Ocala	Marion	98	27	68.8	99	June 3	22	Jan. 1
Okeechobee	Okeechobee .....	...	1	...	...	...	...	...
Orange City.....	Volusia	39	25	...	103	Aug. 15	18	Jan. 2
Orlando	Orange	111	27	72.6	101	Aug. 15	26	Jan. 2†
Pinellas Park.....	Pinellas	20	7	72.4	97	Aug. 7	27	Jan. 4
Plant City.....	Hillsboro	121	26	...	98	Aug. 14	26	Jan. 2
Rockwell	Marion	54	17	...	103	June 3	20	Jan. 1
St. Cloud	Osceola .....	...	5	...	...	...	27	Jan. 2†
St. Leo	Pasco	190	24	71.0	98	Aug. 15	27	Jan. 2†
St. Petersburg.....	Pinellas .....	...	4	73.9	96	Aug. 15	34	Jan. 2
Sanford	Seminole	25	11	71.5	100	June 2	24	Jan. 2†
Tampa	Hillsboro	104	29	73.1	98	June 3	31	Jan. 4
Tarpon Springs.....	Pinellas	20	34	72.3	96	Aug. 27	26	Jan. 4
Titusville	Brevard	16	23	71.9	99	June 3	24	Jan. 2
Southern Division.								

Arcadia	DeSoto	61	17	.....	.....	.....	27	Jan. 18
Avon Park	DeSoto	150	20	72.9	96	June 3†	31	Jan. 4
Boca Grande	Lee	11	3	.....	96	Aug. 4	.....	.....
Bradentown	Manatee	22	35	.....	98	July 21	28	Jan. 2†
Davie	Broward	10	6	73.0	96	Aug. 15	23	Jan. 4†
Fort Lauderdale	Broward	10	6	74.7	97	Aug. 15	32	Jan. 2
Fort Myers	Lee	12	47	73.4	95	July 22	32	Jan. 5
Griffin	Broward	12	6	.....	.....	.....	26	Jan. 4
Homestead	Dade	13	9	74.5	96	July 9	27	Jan. 4
Hypoluxo	Palm Beach	9	24	74.8	97	June 23	29	Jan. 2
Key West	Monroe	15	48	77.4	92	Aug. 19	46	Jan. 4
Lock No. 1	Broward .....	.....	.....	.....	.....	.....	.....	.....
Long Key	Monroe	9	3	77.5	94	June 15†	42	Jan. 4
Miami (1)	Dade	83	17	74.6	92	Aug. 15	32	Jan. 4
Miami (2)	Dade	10	8	75.7	96	Aug. 15	31	Jan. 4
Moore Haven	DeSoto .....	.....	1	.....	98	Aug. 15	.....	.....
Punta Gorda	DeSoto	7	4	.....	.....	.....	34	Jan. 1
Ritta	Palm Beach	18	6	.....	98	Aug. 15	.....	.....
Sand Key	Monroe	42	13	.....	89	July 19†	50	Jan. 4
Western Division.								
Apalachicola	Franklin	24	15	.....	101	Aug. 15	20	Jan. 1
Bonifay	Holmes	111	13	68.2	101	June 16	15	Jan. 13
DeFuniak Springs	Walton	193	21	.....	102	June 16†	15	Jan. 13
Garniers (near)	Okaloosa	22	6	.....	101	Aug. 15†	13	Jan. 12
Marianna	Jackson	120	17	67.6	103	Aug. 16	15	Jan. 1†
Molino	Escambia	49	16	.....	101	Aug. 15	18	Jan. 12
Pensacola	Escambia	151	39	67.6	99	Aug. 16	18	Jan. 12
St. Andrews	Bay	14	22	.....	102	Aug. 16	16	Jan. 1
Wausau	Washington	250	20	67.9	104	June 16	15	Jan. 1†

† On other dates also.

CLIMATOLOGICAL DATA FOR THE YEAR 1918.

STATIONS.	COUNTIES.	PRECIPITATION, IN INCHES.						Number of Rainy Days.	SKY.			Prevailing Wind Direction.
		Length of Record, years.	Total for Year.	Greatest Monthly.	Month.	Least Monthly.	Month.		Number of Clear Days.	Number of Partly Cloudy Days.	Number of Cloudy Days.	
Northern Division.												
Archer	Alachua	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bristol	Liberty	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.
Camp Johnston....	Duval	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carrabelle	Franklin	20	49.34	6.13	June	0.38	Feb.	77	.....	.....	.....	.....
Cedar Keys	Levy	32	39.12	6.07	July	0.30	Oct.	66	242	67	56	w.
Crescent City.....	Putnam	20	51.72	10.82	Oct.	0.22	Feb.	109	198	131	36	ne.
Federal Point.....	Putnam	27	46.61	8.32	Oct.	0.03	Feb.	126	109	153	103	se.
Fenholloway	Taylor	12	49.02	10.20	July	0.56	Feb.	140	172	148	45	ne.
Fernandina	Nassau	26	41.69	7.19	April	0.17	Feb.	101	61	233	71	sw.
Gainesville	Alachua	30	48.26	10.21	Aug.	0.25	Feb.	100	.....	.....	.....	se.
Hilliard	Nassau	10	47.54	6.88	Sept.	0.63	Feb.	122	153	138	74	sw.
Jacksonville	Duval	48	39.55	6.17	Sept.	0.21	Feb.	101	203	126	36	.....
Jasper	Hamilton	17	.....	.....	.....	0.21	Feb.	124	141	124	100	sw.
Johnstown	Bradford	21	50.54	11.72	Aug.	0.25	.....	.....	.....	.....	.....	.....
Lake City.....	Columbia	35	53.22	7.92	April	0.39	Feb.	89	.....	.....	.....	.....
Live Oak.....	Suwanee	22	.....	.....	.....	.....	Feb.	100	125	103	137	ne.

Maccleenny	Baker	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison	Madison	19	54.35	7.45	April	1.67	.....	.....	.....	.....	.....	.....	.....
Melrose	Alachua	5	45.01	6.85	Oct.	0.10	Jan.	132	.....	.....	.....	se.	.....
Middleburg	Clay	18	47.71	10.65	April	0.20	Feb.	111	226	96	43	.....	.....
Monticello	Jefferson	15	.....	.....	.....	.....	Feb.	78	.....	.....	.....	.....	.....
Morton's Farm	Duval	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Pleasant	Gadsden	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Old Town	Lafayette	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.	.....
Quincy	Gadsden	4	60.23	8.11	April	0.99	.....	.....	.....	.....	.....	.....	.....
St. Augustine	St. Johns	50	38.46	5.71	April	0.60	Feb.	117	192	78	95	sw.	.....
Satsuma Heights	Putnam	11	53.95	10.06	Oct.	0.06	Feb.	80	.....	.....	.....	ne.	.....
Switzerland	St. Johns	27	49.29	8.21	June	0.60	Feb.	126	.....	.....	.....	.....	.....
Tallahassee	Leon	34	47.01	8.16	Dec.	1.18	Feb.	95	.....	.....	.....	e.	.....
Central Division.													
Bartow	Polk	32	53.05	10.19	June	0.74	Feb.	124	117	209	39	se.	.....
Brooksville (1)	Hernando	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brooksville (2)	Hernando	7	59.89	8.11	Aug.	1.62	Feb.	135	157	129	79	ne.	.....
Bushnell	Sumter	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clermont	Lake	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DeLand	Volusia	16	51.66	7.71	July	0.21	Feb.	119	.....	.....	.....	sw.	.....
Eustis	Lake	28	62.06	13.28	Oct.	0.06	Feb.	110	234	65	66	ne.	.....
Fellsmere	St. Lucie	7	45.98	9.56	Sept.	1.49	Nov.	134	172	136	57	ne.	.....
Fort Meade	Polk	36	47.69	9.12	Sept.	1.43	May	120	.....	.....	.....	sw.	.....
Fort Pierce	St. Lucie	24	56.36	14.22	Sept.	0.69	Feb.	143	114	177	74	se.	.....
Inverness	Citrus	20	52.27	9.08	June	0.00	Feb.	92	.....	.....	.....	sw.	.....
Isleworth	Orange	3	47.48	7.57	April	0.00	Feb.	70	.....	.....	.....	.....	.....
Kissimmee	Osceola	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	e.	.....
Lakeland	Polk	4	50.40	10.40	Sept.	†	Feb.	83	209	101	55	ne.	.....
Lucerne Park	Polk	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	ne.	.....

CLIMATOLOGICAL DATA FOR THE YEAR 1918—Continued.

STATIONS.	COUNTIES.	PRECIPITATION, IN INCHES.						Number of Rainy Days.	SKY.			Prevailing Wind Direction.
		Length of Record, years.	Total for Year.	Greatest Monthly.	Month.	Least Monthly.	Month.		Number of Clear Days.	Number of Partly Cloudy Days.	Number of Cloudy Days.	
Lynne (near).....	Marion	5	48.24	7.87	June	0.06	Feb.	114	...	...	...	sw.
Malabar	Brevard	27	44.73	9.57	Sept.	0.10	May	103	...	...	...	se.
McDonald	Orange	16	55.59	10.32	June	0.10	Feb.	119	...	...	...	ne.
Merritts Island	Brevard	40	55.36	13.3	Oct.	0.37	May	108	231	90	44	se.
New Smyrna.....	Volusia	35	44.65	7.52	Oct.	0.40	May	110	138	188	39	ne.
Ocala	Marion	27	65.09	11.76	Aug.	2.26	Feb.	98	...	...	...	...
Okeechobee	Okeechobee ..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Orange City.....	Volusia	28	47.50	8.81	Sept.	0.48	Feb.	113	120	194	51	se.
Orlando	Orange	27	56.32	12.30	July	0.14	Feb.	139	172	177	16	n.
Pinellas Park.....	Pinellas	7	40.07	7.50	Sept.	0.10	Feb.	124	...	...	...	w.
Plant City.....	Hillsboro	26	49.10	10.12	Aug.	†	Feb.	83	194	115	56	ne.
Rockwell	Marion	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Cloud.....	Osceola	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Leo.....	Pasco	24	54.37	10.27	Aug.	1.12	Feb.	123	197	113	55	e.
St. Petersburg.....	Pinellas	4	45.46	8.55	Aug.	0.12	Feb.	125	162	123	80	ne.
Sanford	Seminole	11	45.03	7.48	Oct.	0.11	Feb.	112	175	77	110	ne.
Tampa	Hillsboro	29	35.81	8.11	Aug.	0.08	Feb.	106	82	174	109	ne.
Tarpon Springs.....	Pinellas	27	44.41	10.35	Aug.	0.26	Feb.	89	204	70	91	w.
Titusville.....	Brevard	23	45.70	8.05	Sept.	0.25	Feb.	121	...	...	...	se.
Southern Division.												

Arcadia	DeSoto	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Avon Park.....	DeSoto	20	46.18	9.60	Aug.	0.23	Feb.	108	154	146	65	e.	.....	.....
Boca Grande.....	Lee	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bradentown	Manatee	36	48.07	11.61	Aug.	0.20	Feb.	102	200	96	69	sw.	.....	.....
Davie	Broward	6	58.65	9.93	Sept.	0.61	Nov.	120	.....	.....	.....	e.	.....	.....
Fort Lauderdale	Broward	6	58.00	10.49	Oct.	0.48	Jan.	142	183	111	71	e.	.....	.....
Fort Myers.....	Lee	52	40.06	8.28	Aug.	0.61	Nov.	121	.....	.....	.....	e.	.....	.....
Oriffin	Broward	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	e.	.....	.....
Homestead	Dade	9	64.96	9.98	June	0.40	Feb.	93	197	84	84	se.	.....	.....
Hypoluxo	Palm Besch..	24	54.06	9.41	Oct.	0.27	Feb.	120	223	94	48	se.	.....	.....
Key West.....	Monroe	48	29.77	7.94	Oct.	0.12	Feb.	96	191	113	61	e.	.....	.....
Lock No. 1.....	Broward	6	62.96	10.50	Sept.	0.90	Jan.	129	.....	.....	.....	e.	.....	.....
Long Key.....	Monroe	3	42.66	10.01	Oct.	0.26	Feb.	97	263	80	22	e.	.....	.....
Miami (1).....	Dade	28	43.33	10.0	Sept.	0.60	Nov.	134	120	159	86	e.	.....	.....
Miami (2).....	Dade	8	50.39	10.00	Sept.	0.72	Nov.	156	.....	.....	.....	ne.	.....	.....
Moore Haven.....	DeSoto	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Punta Gorda.....	DeSoto	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ritta	Palm Beach..	6	35.02	7.06	Aug.	0.20	Nov.	130	99	202	64	ne.	.....	.....
Sand Key.....	Monroe	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	e.	.....	.....
Western Division.														
Apalachicola	Franklin	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	n.	.....	.....
Bonifay	Holmes	13	69.58	10.87	Aug.	0.99	Mar.	93	.....	.....	.....	nw.	.....	.....
DeFuniak Springs..	Walton	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Garniers (near)....	Okaloosa	6	60.36	9.55	April	0.50	Mar.	82	.....	.....	.....	sw.	.....	.....
Marianna	Jackson	17	59.69	11.43	Nov.	1.10	Mar.	101	117	167	81	n.	.....	.....
Molito	Escambia	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pensacola	Escambia	39	68.34	14.79	Aug.	0.32	Mar.	111	127	106	132	ne.	.....	.....
St. Andrews	Bay	22	59.39	11.76	April	0.96	Mar.	96	191	123	52	s.	.....	.....
Wausau	Washington .	20	65.04	9.13	Nov.	1.41	June	80	.....	.....	.....	s.	.....	.....

† Amount too small to measure.

CLIMATOLOGICAL DATA--Continued.
 Monthly and Annual Precipitation for the year 1918, with Departures from the Normal.

Stations.	January.		February.		March.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northern Division.						
Archer						
Bristol	4.01		1.77		1.09	
Camp Johnston						
Carrabelle	4.31	+ 0.98	0.38	- 4.05	1.23	- 2.76
Cedar Keys	4.31	- 0.15	0.69	- 2.03	1.74	- 1.18
Crescent City	2.41	- 0.29	0.22	- 3.42	2.54	- 0.29
Federal Point	3.23	+ 0.33	0.03	- 3.29	2.25	- 0.86
Fenholloway	3.10		0.56		1.28	
Fernandina	3.45	+ 0.58	0.17	- 3.87	3.65	+ 0.37
Gainesville	2.90	- 0.46	0.25	- 2.76	1.98	- 1.26
Hilliard	2.83		0.63		2.12	
Jacksonville	2.78	- 0.34	0.21	- 3.22	2.31	- 1.21
Jasper			1.80	- 2.38	1.65	- 2.35
Johnstown	3.85	+ 1.24	0.25	- 3.62	1.89	- 1.16
Lake City	3.40	- 0.21	0.39	- 3.78	3.18	- 1.02
Live Oak	4.08	+ 0.58	0.30	- 4.18		
Maccleenny	4.89	+ 2.31	0.41	- 3.64	2.61	- 1.09
Madison	1.67	- 2.09	2.40	- 2.20	2.41	- 1.27
Melrose	2.74		0.10		2.60	
Middleburg	3.83	+ 0.95	0.20	- 3.44	3.18	- 0.73
Monticello	1.84	- 2.35	0.80	- 3.64	2.58	- 0.49
Morton's Farm	2.88		0.45		2.24	
Mount Pleasant	3.75	+ 0.63	1.09	- 4.89	1.49	- 1.82
Old Town						
Quincy	5.02		0.99		3.96	
St. Augustine	0.92	- 1.70	0.60	- 2.39	3.41	+ 0.43
Satsuma Heights	2.57		0.06		2.84	
Switzerland	3.49	+ 0.84	0.60	- 2.73	1.95	- 1.47
Tallahassee	3.23	- 0.71	1.18	- 3.75	1.51	- 3.37
Central Division.						
Bartow	3.42	+ 0.89	0.74	- 2.14	2.48	+ 0.06
Brooksville (1)	3.99	+ 0.78	2.15	- 1.27	3.79	+ 1.47
Brooksville (2)	4.21		1.62		4.86	

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	January.		February.		March.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bushnell						
Clermont	2.92	+ 0.12	0.24	- 2.99	1.58	- 0.48
DeLand	2.36	- 0.70	0.21	- 3.16	3.04	+ 0.61
Eustis	3.30	+ 0.19	0.06	- 2.98	1.48	- 1.11
Fellsmere	3.38		1.64		2.04	
Fort Meade	2.90	+ 0.31	1.68	- 0.96	4.33	+ 1.58
Fort Pierce	3.51	+ 0.12	0.69	- 2.17	4.38	+ 1.54
Inverness	2.95	+ 0.18	0.00	- 3.29	3.69	+ 0.88
Isleworth	3.11		0.00		2.34	
Kissimmee	4.29	+ 1.36	0.68	- 2.92	4.16	+ 1.86
Lakeland	2.77		†		4.88	
Lucerne Park	2.99		†		5.27	
Lynne (near)	3.47		0.06		2.57	
Malabar	3.65	+ 0.79	0.44	- 1.91	5.19	+ 3.06
McDonald	4.33	+ 1.41	0.10	- 2.89	1.49	- 0.50
Merritts Island	3.64	+ 0.56	0.94	- 1.69	3.69	+ 1.21
New Smyrna	2.90	- 0.40	0.49	- 2.51	4.00	+ 1.09
Ocala	4.93	+ 2.42	2.26	- 1.01	2.77	- 0.06
Okeechobee			0.53		2.74	
Orange City	3.05	+ 0.45	0.48	- 2.20	1.74	- 0.95
Orlando	3.72	+ 1.00	0.14	- 2.60	1.72	- 0.62
Pinellas Park	2.81		0.10		0.76	
Plant City	2.42	- 0.18	†	- 3.27	3.33	+ 0.90
Rockwell			0.51	- 2.88	2.40	- 0.62
St. Cloud	3.03		0.25		3.45	
St. Leo	4.09	+ 0.55	1.12	- 2.48	3.32	+ 0.76
St. Petersburg	2.61		0.12		0.50	
Sanford	3.68		0.11		1.51	
Tampa	3.00	+ 0.20	0.08	- 3.19	0.19	- 1.20
Tarpon Springs	4.77	+ 1.90	0.26	- 2.89	1.31	- 1.09
Titnsville	2.48	+ 0.30	0.25	- 3.06	1.71	- 0.89
Southern Division.						
Arcadia	4.00	+ 1.61	0.05	- 2.28	3.25	+ 0.26
Avon Park	4.09	+ 1.72	0.23	- 2.63	2.29	+ 0.12
Boca Grande					1.46	
Bradentown	3.64	+ 0.72	0.20	- 2.91	0.55	- 1.94

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	January.		February.		March.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Davle	0.81	.....	2.11	.....	5.06	.....
Fort Lauderdale	0.48	.....	1.18	.....	3.79	.....
Fort Myers	3.39	+ 1.14	1.53	- 0.70	1.06	- 0.99
Griffin	0.81	.....	0.92	.....	2.89	.....
Homestead	1.60	.....	0.40	.....	2.78	.....
Hypoluxo	1.01	- 2.36	0.27	- 3.11	6.43	+ 3.99
Key West	1.05	- 0.93	0.12	- 1.52	2.65	+ 1.17
Lock No. 1	0.90	.....	1.67	.....	4.39	.....
Long Key	1.31	.....	0.26	.....	3.59	.....
Miami (1)	0.85	- 2.60	2.51	- 0.19	1.48	- 1.24
Miami (2)	1.06	.....	2.21	.....	2.13	.....
Moore Haven .....	.....	.....	.....	.....	.....	.....
Punta Gorda	2.20	.....	0.25	.....	1.02	.....
Ritta	1.99	.....	2.28	.....	2.75	.....
Sand Key	-0.94	.....	0.07	.....	4.03	.....
Western Division.						
Apalachicola	3.68	- 0.50	.....	.....	3.02	+ 0.17
Bonifay	5.21	+ 0.80	3.55	- 1.75	0.99	- 3.04
DeFuniak Springs	2.42	- 1.47	1.20	- 5.54	0.41	- 4.80
Garniers (near)	4.98	.....	2.47	.....	0.50	.....
Marianna	3.90	+ 0.44	1.95	- 3.56	1.16	- 4.13
Molino	5.30	+ 0.65	2.00	- 4.08	.....	.....
Pensacola	5.53	+ 1.49	2.02	- 2.47	0.32	- 5.04
St Andrews	4.69	+ 1.26	1.05	- 3.65	0.96	- 2.85
Wausau	4.03	+ 0.15	3.05	- 1.90	1.48	- 3.88

† Amount too small to measure.

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	April.		May.		June.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northern Division.						
Archer	4.88	+ 2.69	0.95	- 2.74	10.00	+ 2.28
Bristol	10.36	.....	4.20	.....	6.53	.....
Camp Johnston .....	.....	.....	3.19	.....	4.71	.....
Carrabelle	4.89	+ 2.53	4.12	+ 1.40	6.13	+ 1.26
Cedar Keys	4.20	+ 2.49	2.56	+ 0.77	4.40	- 1.29
Crestcent City	5.53	+ 3.45	2.65	- 1.22	6.64	+ 0.85
Federal Point	7.87	+ 5.26	2.12	- 1.62	2.70	- 3.29
Fenholloway	7.07	.....	2.71	.....	3.36	.....
Fernandina	7.19	+ 4.70	0.77	- 2.62	4.84	- 0.06
Gainesville	5.11	+ 3.20	2.72	- 0.38	4.61	- 2.09
Hilliard	6.04	.....	1.93	.....	4.51	.....
Jacksonville	5.96	+ 3.24	2.50	- 1.75	3.32	- 2.21
Jasper	4.82	+ 2.53	3.47	- 0.54	10.41	+ 3.73
Johnstown	8.34	+ 6.37	2.69	- 0.85	3.99	- 2.55
Lake City	7.92	+ 5.31	1.94	- 1.17	6.85	0.00
Live Oak .....	.....	.....	.....	.....	.....	.....
Macclenny	8.43	+ 5.69	1.65	- 2.49	.....	.....
Madison	7.45	+ 4.58	3.09	- 1.04	7.06	+ 1.21
Melrose	5.99	.....	0.97	.....	4.68	.....
Middleburg	10.65	+ 7.86	1.66	- 3.67	2.64	- 4.23
Monticello	5.53	+ 2.31	3.64	- 0.28	4.32	- 2.37
Morton's Farm	7.71	.....	0.83	.....	3.67	.....
Mount Pleasant	8.54	+ 4.86	1.81	- 1.28	6.59	+ 0.48
Old Town .....	.....	.....	.....	.....	9.11	.....
Quincy	8.11	.....	2.51	.....	5.80	.....
St. Augustine	5.71	+ 3.07	1.98	- 1.42	2.99	- 2.18
Satsuma Heights	5.48	.....	1.39	.....	7.09	.....
Switzerland	5.42	+ 2.85	2.76	- 0.54	8.21	+ 2.83
Tallahassee	6.12	+ 2.97	5.28	+ 1.55	5.68	- 0.78
Central Division.						
Bartow	3.21	+ 1.35	3.56	- 0.11	10.19	+ 2.18
Brooksville (1)	6.39	+ 4.30	2.65	- 0.87	3.63	- 3.73
Brooksville (2)	5.49	.....	3.59	.....	4.69	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	April.		May.		June.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bushnell	2.19	.....	0.21	.....	3.90	.....
Clermont	6.09	+ 4.09	2.69	— 0.89	.....	.....
DeLand	4.71	+ 2.62	1.47	— 2.21	5.92	— 1.41
Eustis	4.55	+ 2.35	1.02	— 2.48	5.55	— 0.60
Fellsmere	2.48	.....	2.08	.....	6.35	.....
Fort Meade	3.16	+ 1.17	1.43	— 3.02	5.41	— 3.97
Fort Pierce	6.74	+ 4.25	1.35	— 2.80	6.30	— 1.00
Inverness	5.70	+ 3.63	1.64	— 2.51	9.08	— 2.98
Isleworth	7.57	.....	2.89	.....	6.00	.....
Kissimmee	6.99	+ 4.93	1.59	— 2.22	.....	.....
Lakeland	3.87	.....	4.03	.....	3.47	.....
Lucerne Park	3.93	.....	3.41	.....	5.71	.....
Lynne (near)	7.29	.....	1.57	.....	7.87	.....
Malabar	3.95	+ 1.94	0.10	— 3.95	2.49	— 2.93
McDonald	7.46	+ 5.53	3.96	+ 0.43	10.32	+ 5.07
Merritts Island	3.43	+ 0.74	0.37	— 3.38	4.78	— 1.67
New Smyrna	4.91	+ 2.86	0.40	— 2.90	4.29	— 1.21
Ocala	6.84	+ 4.87	2.81	— 0.82	5.52	— 1.94
Okeechobee	2.25	.....	.....	.....	.....	.....
Orange City	4.89	+ 3.24	0.77	— 2.68	5.02	— 1.75
Orlando	8.24	+ 6.22	2.11	— 1.70	5.37	— 1.89
Pinellas Park	1.58	.....	2.15	.....	2.54	.....
Plant City	3.62	+ 1.66	3.42	— 0.80	4.73	— 3.42
Rockwell	5.51	+ 3.76	.....	.....	6.60	— 0.46
St. Cloud	5.90	.....	0.66	.....	8.33	.....
St. Leo	3.80	+ 1.81	1.74	— 2.09	6.81	— 2.01
St. Petersburg	1.69	.....	2.75	.....	4.02	.....
Sanford	6.95	.....	0.90	.....	2.81	.....
Tampa	1.89	+ 0.04	2.15	— 0.77	1.26	— 7.08
Tarpon Springs	2.34	+ 0.62	1.65	— 0.85	1.92	— 5.01
Titusville	4.59	+ 2.75	3.41	— 1.27	4.58	— 2.72
Southern Division.						
Arcadia .....	.....	.....	.....	.....	.....	.....
Avon Park	2.64	+ 0.69	0.61	— 4.25	5.95	— 3.39
Boca Grande	0.39	.....	.....	.....	.....	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	April.		May.		June.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bradentown	2.02	+ 0.14	5.18	+ 2.15	1.28	- 6.91
Davle	6.90	.....	3.79	.....	7.58	.....
Fort Lauderdale	7.51	.....	7.23	.....	6.18	.....
Fort Myers	1.36	- 0.94	4.23	- 1.46	6.68	- 2.49
Griffin	3.28	.....	2.48	.....	5.88	.....
Homestead	5.61	.....	3.81	.....	9.98	.....
Hypoluxo	9.30	+ 6.57	1.23	- 4.72	4.63	- 4.19
Key West	2.80	+ 1.50	5.19	+ 1.83	0.43	- 3.82
Lock No. 1	3.22	.....	4.61	.....	7.05	.....
Long Key	2.12	.....	2.87	.....	3.81	.....
Miami (1)	4.49	+ 1.90	2.80	- 3.57	6.17	- 1.72
Miami (2)	3.82	.....	2.50	.....	7.65	.....
Moore Haven	2.05	.....	0.35	.....	2.55	.....
Punta Gorda .....	.....	.....	1.84	.....	.....	.....
Ritta	2.97	.....	0.93	.....	3.60	.....
Sand Key	1.93	.....	2.62	.....	0.74	.....
Western Division.						
Apalachicola	2.93	+ 0.45	1.97	- 1.46	3.75	+ 0.83
Bonifay	11.34	+ 7.42	1.36	- 2.76	1.75	- 3.52
DeFuniak Springs	8.98	+ 5.85	2.56	- 1.51	2.38	- 3.29
Garniers (near)	9.55	.....	2.14	.....	4.57	.....
Marianna	7.37	+ 4.26	2.95	- 0.71	2.40	- 2.45
Molino .....	.....	.....	.....	.....	.....	.....
Pensacola	13.90	+ 10.74	1.15	- 1.53	2.39	- 2.48
St. Andrews	11.76	+ 9.40	2.28	- 0.99	2.49	- 2.64
Wausau	8.11	+ 4.97	8.32	+ 3.87	1.41	- 4.33

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Precipitation for the year 1918, with Departures from the Normal.

Stations.	July.		August.		September.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northern Division.						
Archer	5.39	— 3.15	7.53	— 0.13	7.41	+ 1.20
Bristol	6.80	.....	8.76	.....	5.89	.....
Camp Johnston	6.33	.....	4.28	.....	5.11	.....
Carrabelle	4.89	— 1.18	3.07	— 4.09	5.54	— 1.76
Cedar Keys	6.07	— 1.95	3.15	— 5.11	5.20	— 0.64
Crescent City	3.88	— 2.71	8.33	+ 1.15	3.55	— 3.29
Federal Point	3.11	— 3.79	6.11	— 0.99	4.59	— 3.21
Fenholloway	10.20	.....	6.36	.....	5.89	.....
Fernandina	1.70	— 4.30	3.28	— 2.88	6.18	— 2.08
Gainesville	4.36	— 2.86	10.21	+ 3.34	5.46	— 0.26
Hillard	4.44	.....	5.93	.....	6.88	.....
Jacksonville	3.35	— 2.85	3.12	— 3.09	6.17	— 1.86
Jasper	6.12	+ 0.21	.....	.....	.....	.....
Johnstown	1.98	— 5.96	11.72	+ 3.72	5.05	— 0.21
Lake City	5.29	— 2.48	6.32	— 0.34	5.77	+ 0.39
Live Oak .....	.....	.....	4.24	— 2.82	4.80	+ 0.09
Maccleenny	6.10	— 1.13	8.55	+ 1.32	5.26	+ 0.16
Madison	5.09	— 2.36	5.86	— 1.41	6.91	+ 1.39
Melrose	5.31	.....	5.34	.....	3.66	.....
Middleburg	4.07	— 3.19	4.42	— 2.22	5.01	— 1.91
Monticello .....	.....	.....	.....	.....	.....	.....
Morton's Farm .....	.....	.....	.....	.....	.....	.....
Mount Pleasant	3.14	— 4.80	5.52	+ 0.60	3.85	— 2.40
Old Town	6.82	.....	6.11	.....	7.36	.....
Quincy	4.43	.....	6.97	.....	5.48	.....
St. Augustine	2.60	— 2.65	3.27	— 2.78	5.24	— 1.25
Satsuma Heights	7.17	.....	5.26	.....	5.26	.....
Switzerland	5.56	— 1.91	5.55	— 0.87	4.95	— 3.11
Tallahassee	1.28	— 6.24	3.98	— 3.06	3.85	— 1.24
Central Division.						
Bartow	5.63	— 1.78	7.11	— 0.78	9.21	+ 1.20
Brooksville (1) .....	.....	.....	.....	.....	.....	.....
Brooksville (2)	8.05	.....	8.11	.....	5.69	.....

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Precipitation for the year 1918, with Departures from the Normal.

Stations.	July.		August.		September.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bushnell	4.40	.....	.....	.....	5.20	.....
Clermont .....	.....	.....	.....	.....	5.70	- 0.89
DeLand	7.71	- 0.18	4.56	- 2.88	5.83	+ 0.52
Eustis	3.90	- 3.13	6.30	- 0.14	5.04	- 1.31
Fellsmere	4.98	.....	3.95	.....	9.56	.....
Fort Meade	6.26	- 2.79	4.76	- 4.38	9.12	+ 0.89
Fort Pierce	8.21	+ 2.78	2.74	- 3.33	14.22	+ 7.13
Inverness	8.01	- 1.94	3.85	- 3.59	6.37	+ 0.59
Isleworth	6.33	.....	2.25	.....	6.73	.....
Kissimmee	9.99	+ 3.10	8.05	+ 1.01	6.34	- 0.49
Lakeland	4.74	.....	6.75	.....	10.40	.....
Lucerne Park	10.37	.....	7.01	.....	8.30	.....
Lynne (near)	4.97	.....	4.78	.....	4.84	.....
Malabar	7.64	+ 2.92	1.10	- 3.86	9.57	+ 2.14
McDonald	5.11	- 2.39	3.43	- 3.52	8.04	+ 2.14
Merritts Island	7.65	+ 2.21	2.01	- 3.52	9.37	+ 1.76
New Smyrna	5.60	+ 0.05	3.27	- 2.63	6.34	- 1.29
Ocala	7.19	- 0.82	11.76	+ 4.27	9.10	+ 2.31
Okeechobee .....	.....	.....	.....	.....	.....	.....
Orange City	3.86	- 2.47	3.51	- 3.51	8.81	+ 2.69
Orlando	12.30	+ 5.05	3.34	- 3.81	6.60	- 0.79
Pinellas Park	3.16	.....	6.81	.....	7.50	.....
Plant City	5.75	- 2.13	10.12	+ 0.89	5.55	- 1.29
Rockwell	8.82	- 0.16	5.10	- 3.66	5.05	- 0.48
St., Cloud .....	.....	.....	.....	.....	.....	.....
St. Leo	7.18	- 1.67	10.27	+ 0.94	5.29	- 1.18
St. Petersburg	2.44	.....	8.55	.....	6.58	.....
Sanford	6.02	.....	2.88	.....	7.39	.....
Tampa	4.88	- 3.55	8.11	- 0.48	5.39	- 2.02
Tarpon Springs	6.24	- 1.86	10.35	+ 0.56	3.56	- 3.49
Titusville	5.45	- 1.02	2.80	- 2.59	8.05	+ 0.49
Southern Division.						
Arcadia .....	.....	.....	.....	.....	.....	.....
Avon Park	5.77	- 2.08	9.50	+ 2.02	8.11	+ 2.30
Boca Grande	1.32	.....	4.01	.....	6.23	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	July.		August.		September.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bradentown	5.19	— 5.23	11.61	+ 2.42	3.72	— 3.88
Davie	7.56	.....	3.27	.....	9.93	.....
Fort Lauderdale	6.00	.....	1.33	.....	9.53	.....
Fort Myers	3.93	— 4.07	8.28	— 0.05	6.99	— 0.68
Griffin .....	.....	.....	.....	.....	8.27	.....
Homestead	6.43	.....	5.65	.....	8.28	.....
Hypoluxo	6.04	+ 0.69	4.36	— 0.56	8.57	+ 0.04
Key West	1.72	— 1.87	1.85	— 2.84	3.53	— 3.26
Lock No. 1	6.74	.....	2.55	.....	10.50	.....
Long Key	5.42	.....	3.50	.....	7.06	.....
Miami (1)	4.01	— 3.23	1.43	— 6.17	10.06	+ 0.45
Miami (2)	6.60	.....	2.10	.....	10.00	.....
Moore Haven	2.87	.....	6.94	.....	10.83	.....
Punta Gorda .....	.....	.....	.....	.....	8.13	.....
Ritta	3.13	.....	7.06	.....	4.54	.....
Sand Key	1.20	.....	2.48	.....	3.57	.....
Western Division.						
Apalachicola	5.25	— 1.79	6.28	— 1.57	9.94	+ 0.25
Bonifay	6.92	+ 1.28	10.87	+ 6.19	1.85	— 3.08
DeFuniak Springs	4.86	— 2.59	8.57	— 0.67	.....	.....
Garniers (near)	8.03	.....	5.84	.....	2.76	.....
Marianna	4.89	— 1.73	7.28	+ 1.82	2.53	— 3.44
Molino .....	.....	.....	6.59	— 0.57	2.85	— 4.96
Pensacola	6.02	— 1.25	14.79	+ 7.63	3.30	— 1.93
St. Andrews	5.01	— 1.90	4.86	— 3.64	3.44	— 3.71
Wausan	6.70	— 0.47	8.39	+ 1.12	3.66	— 3.08

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
parture, from the Normal.

Stations.	October.		November.		December.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Northern Division.						
Archer	5.64	+ 2.80	5.60	+ 3.41	.....	.....
Bristol	4.06	.....	7.54	.....	.....	.....
Camp Johnstop.....	8.74	.....	3.99	.....	2.86	.....
Cartrabelle	5.04	+ 1.92	4.24	+ 2.06	5.50	+ 0.21
Cedar Keys.....	0.30	- 2.82	2.21	- 0.11	5.19	+ 2.61
Crescent City.....	10.82	+ 7.06	2.10	+ 0.57	3.05	+ 0.45
Federal Point...?	8.32	+ 3.37	2.96	+ 0.92	3.32	+ 0.47
Fenholloway	0.91	.....	3.10	.....	4.48	.....
Fernandina	3.79	- 1.31	3.62	+ 1.02	2.05	- 0.31
Gainesville	3.81	+ 1.13	3.39	+ 1.50	3.46	+ 0.41
Hilliard	3.98	.....	4.12	.....	4.13	.....
Jacksonville	3.97	- 1.09	3.26	+ 1.07	2.60	- 0.39
Jasper .....	.....	.....	3.85	+ 2.10	3.84	+ 0.03
Johnstown	5.56	+ 2.51	3.27	+ 1.62	1.95	- 1.46
Lake City	3.42	+ 0.39	3.82	+ 1.23	4.92	+ 1.30
Live Oak	2.29	- 0.60	3.75	+ 1.55	4.50	+ 1.63
Macclenny	4.29	+ 1.25	.....	.....	.....	.....
Madison	2.55	- 0.35	5.01	+ 2.87	4.85	+ 1.07
Melrose	6.85	.....	3.40	.....	3.37	.....
Middleburg	6.37	+ 2.05	2.63	+ 1.17	3.05	- 0.01
Monticello .....	.....	.....	.....	.....	.....	.....
Morton's Farm.....	.....	.....	.....	.....	.....	.....
Mount Pleasant.....	.....	.....	6.43	+ 4.47	7.99	+ 3.37
Old Town	6.98	.....	3.22	.....	4.75	.....
Quincy	2.21	.....	6.73	.....	8.04	.....
St. Augustine.....	5.29	+ 0.31	3.50	+ 1.22	2.95	+ 0.27
Satsuma Heights.....	10.06	.....	2.25	.....	4.52	.....
Switzerland	6.44	+ 2.06	1.63	- 0.53	2.73	- 0.15
Tallahassee	2.30	- 0.85	4.44	+ 1.79	8.16	+ 3.56
Central Division.						
Bartow	2.13	- 1.56	2.52	+ 0.74	2.85	+ 0.46
Brooksville (2).....	.....	.....	.....	.....	.....	.....
Brooksville (2).....	6.30	.....	3.92	.....	3.36	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	October.		November.		December.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bushnell	.....	.....	.....	.....	.....	.....
Clermont	1.20	- 2.34	4.17	+ 2.67	1.78	- 0.52
DeLand	7.45	+ 2.56	3.33	+ 1.69	5.02	+ 2.83
Eustis	13.28	+ 9.89	4.73	+ 3.16	2.85	+ 0.53
Fellsmere	5.96	.....	1.49	.....	2.07	.....
Fort Meade	3.76	- 0.29	1.98	+ 0.48	2.96	+ 0.63
Fort Pierce	6.02	- 0.14	0.89	- 2.25	1.31	- 0.96
Inverness	2.74	- 0.03	4.99	+ 3.27	3.25	+ 0.47
Isleworth	4.29	.....	3.38	.....	2.59	.....
Kissimmee	5.04	+ 0.56	5.35	+ 3.41	1.33	- 1.11
Lakeland	5.17	.....	3.95	.....	1.32	.....
Lucerne Park	2.64	.....	4.10	.....	.....	.....
Lynne (near)	5.04	.....	2.45	.....	3.33	.....
Malabar	6.59	- 0.52	1.91	- 0.46	2.10	- 0.70
McDonald	5.42	+ 0.97	3.33	+ 1.14	2.60	+ 0.46
Merritts Island	13.78	+ 7.97	3.88	+ 1.59	1.81	- 0.64
New Smyrna	7.52	+ 1.53	1.98	- 0.81	3.95	+ 0.44
Ocala	4.20	+ 1.41	3.18	+ 1.42	4.53	+ 2.05
Okeechobee	.....	.....	.....	.....	0.80	.....
Orange City	8.48	+ 4.07	3.67	+ 1.91	3.22	+ 1.26
Orlando	7.25	+ 2.10	2.30	+ 0.71	3.23	+ 1.08
Pinellas Park	5.13	.....	4.51	.....	3.02	.....
Plant City	2.12	- 1.08	5.90	+ 4.39	2.14	- 0.22
Rockwell	.....	.....	.....	.....	.....	.....
St. Cloud	.....	.....	.....	.....	.....	.....
St. Leo	2.75	- 0.58	5.61	+ 3.64	2.39	- 0.30
St. Petersburg	8.14	.....	4.40	.....	3.66	.....
Sanford	7.48	.....	2.30	.....	3.00	.....
Tampa	2.88	- 0.09	3.07	+ 1.35	2.19	+ 0.17
Tarpon Springs	4.97	+ 2.20	3.22	+ 1.29	3.82	+ 1.38
Titusville	7.73	+ 2.26	2.37	- 0.08	2.28	- 0.50
Southern Division.						
Arcadia	.....	.....	.....	.....	.....	.....
Avon Park	3.82	- 0.57	2.01	+ 0.36	1.16	- 1.06
Boca Grande	.....	.....	.....	.....	0.70	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	October.		November.		December.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Bradentown	7.31	+ 4.29	4.94	+ 3.23	2.43	- 0.16
Davie	7.88	.....	0.61	.....	3.15	.....
Fort Lauderdale	10.49	.....	0.93	.....	3.35	.....
Fort Myers	2.63	- 0.84	0.61	- 0.69	1.17	- 0.55
Griffin	8.74	.....	1.04	.....	2.58	.....
Homestead	7.77	.....	0.88	.....	1.77	.....
Hypoluxo	9.41	- 0.80	1.24	- 2.18	1.57	- 0.86
Key West	7.94	+ 2.56	0.38	- 1.98	2.11	+ 0.27
Lock No. 1	7.56	.....	1.05	.....	2.72	.....
Long Key	10.01	.....	0.31	.....	2.29	.....
Miami (1)	4.82	- 5.72	0.60	- 1.95	4.11	+ 1.87
Miami (2)	6.88	.....	0.72	.....	4.72	.....
Moore Haven	2.72	.....	0.98	.....	0.73	.....
Punta Gorda .....	.....	.....	.....	.....	.....	.....
Ritta	5.39	.....	0.20	.....	0.16	.....
Sand Key .....	.....	.....	.....	.....	.....	.....
Western Division.						
Apalachicola	4.73	+ 1.19	6.83	+ 4.14	15.88	+ 10.95
Bonifay	7.18	+ 2.40	7.77	+ 5.03	10.79	+ 6.36
DeFuniak Springs .....	.....	.....	.....	.....	.....	.....
Garniers (near)	7.85	.....	5.23	.....	6.44	.....
Marianna	6.05	+ 3.04	11.43	+ 8.85	7.78	+ 3.47
Molino	8.11	+ 4.80	.....	.....	.....	.....
Pensacola	8.09	+ 4.01	4.58	+ 0.84	6.25	+ 2.08
St. Andrews	9.34	+ 5.12	5.50	+ 2.47	7.41	+ 2.26
Wausau	5.70	+ 2.87	9.13	+ 5.48	4.99	- 0.27

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Precipitation for the year 1918, with Departures from the Normal.

Stations.	Annual.	
	Precipitation.	Departure.
Northern Division.		
Archer		
Bristol		
Camp Johnston		
Carrabelle	49.34	— 3.43
Cedar Keys	39.12	— 9.41
Crescent City	51.72	+ 2.31
Federal Point	46.61	— 6.70
Fenholloway	40.02	
Fernandina	41.69	—10.76
Gainesville	48.26	— 0.49
Hilliard	47.51	
Jacksonville	39.55	—13.70
Jasper		
Johnstown	50.51	— 0.35
Lake City	53.22	— 0.33
Live Oak		
Macleenny		
Madison	54.35	+ 0.40
Melrose	45.01	
Middleburg	47.71	— 7.37
Monticello		
Morton's Farm		
Mount Pleasant		
Old Town		
Quincy	60.65	
St. Augustine	38.46	— 9.16
Satsuma Heights	53.95	
Switzerland	49.29	— 2.73
Tallahassee	47.01	—10.13
Central Division.		
Bartow	53.05	+ 0.51
Brooksville (1)		
Brooksville (2)	53.89	

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	Annual.	
	Precipitation.	Departure.
Bushnell		
Clermont		
DeLand	51.66	+ 0.34
Eustis	52.06	+ 4.34
Fellsmere	45.98	
Fort Meade	47.69	-10.40
Fort Pierce	56.36	+ 3.12
Inverness	52.27	+ 0.61
Isleworth	47.48	
Kissimmee		
Lakeland	50.40	
Lucerne Park		
Lynne (near)	48.24	
Malabar	44.73	- 3.48
McDonald	55.59	+ 7.85
Merritts Island	55.36	+ 5.14
New Smyrna	44.65	- 5.78
Ocala	65.09	+14.10
Okeechobee		
Orange City	47.50	+ 0.06
Orlando	56.32	+ 4.75
Pinellas Park	40.07	
Plant City	49.10	- 4.55
Rockwell		
St. Cloud		
St. Leo	54.37	+ 2.61
St. Petersburg	45.46	
Sanford	45.03	
Tampa	35.81	+17.32
Tarpon Springs	44.41	- 7.24
Titusville	45.70	- 6.43
Southern Division.		
Arcadia		
Avon Park	40.18	- 6.77
Boca Grande		

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Precipitation for the year 1918, with De-
partures from the Normal.

Stations.	Annual.	
	Precipitation.	Departure.
Bradentown	48.07	— 8.08
Davie	58.65	.....
Fort Lauderdale	58.00	.....
Fort Myers	40.06	—12.32
Griffin .....	.....	.....
Homestead	54.96	.....
Hypoluxo	54.06	— 7.49
Key West	29.77	— 8.89
Lock No. 1	52.96	.....
Long Key	42.55	.....
Miami (1)	43.33	—22.17
Miami (2)	50.39	.....
Moore Haven .....	.....	.....
Punta Gorda .....	.....	.....
Ritta	35.02	.....
Sand Key .....	.....	.....
Western Division.		
Apalachicola .....	.....	.....
Bonifay	69.58	+17.33
DeFuniak Springs .....	.....	.....
Garniers (near)	60.26	.....
Marianna	59.69	+ 5.86
Molino .....	.....	.....
Pensacola	68.34	+12.09
St. Andrews	59.39	+ 1.13
Wausau	65.04	+ 4.53

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Mean Temperatures for the Year 1918, with
 Departures from the Normal—Continued.

Stations.	January.		February.		March.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Northern Division.						
Archer						
Bristol	47.4		61.2		65.4	
Camp Johnston						
Carrabelle						
Cedar Keys			63.7	+ 4.7	69.4	+ 6.2
Crescent City	52.7	— 3.8	66.5	+ 8.3	69.8	+ 4.2
Federal Point	52.2	— 4.4	65.5	+ 7.7	69.6	+ 5.2
Fernandina	48.8	— 5.1	59.7	+ 4.4	66.8	+ 4.5
Gainesville	50.2	— 5.9	64.6	+ 8.0	68.4	+ 3.5
Hilliard	49.6		62.4		67.0	
Jacksonville	50.0	— 3.9	62.8	+ 5.9	67.6	+ 5.7
Jasper			63.4	+ 9.3	66.6	+ 3.9
Johnstown	49.3	— 5.9	64.2	+ 7.7	66.8	+ 2.8
Lake City	47.5	— 7.9	62.6	+ 5.4	67.4	+ 4.0
Live Oak			63.3	+ 7.4		
Macclenny	49.8	— 5.0	63.6	+ 7.8	68.2	+ 4.5
Madison	48.6	— 7.7	61.9	+ 6.6	66.4	+ 4.1
Middleburg	48.6	— 6.0	63.0	+ 7.6	68.7	+ 5.4
Monticello	47.2	— 6.9	58.8	+ 4.5	65.2	+ 2.3
Morton's Farm	48.6		62.4		67.0	
Mount Pleasant	47.7	+ 7.5	61.8	+ 8.5	65.5	+ 3.9
Old Town						
Quincy	47.8		61.5		65.4	
St. Augustine	50.2	— 6.1	62.0	+ 3.4	68.4	+ 5.5
Satsuma Heights	53.8		66.3		70.2	
Switzerland			63.0	+ 6.7	68.3	+ 4.9
Tallahassee	45.8	— 6.6	61.8	+ 7.4	66.4	+ 5.3
Central Division.						
Bartow	55.8	— 4.9	67.9	+ 4.9	71.4	+ 4.2
Brooksville (1)	55.4	— 3.1	68.4	+ 8.5	72.6	+ 6.6
Brooksville (2)	53.6		66.0		68.8	
Bushnell (near)						
Clermont	55.3	— 5.1	68.6	+ 6.6	74.2	+ 5.7
DeLand	52.7	— 5.5	66.4	+ 7.3	70.8	+ 5.2

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	January.		February.		March.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Eustis	53.5	— 5.4	67.4	+ 6.6	71.8	+ 5.0
Fellsmere	56.5	.....	66.9	.....	69.5	.....
Fort Meade	56.1	— 3.7	68.8	+ 7.6	.....	.....
Fort Pierce	59.0	— 4.6	69.2	+ 5.3	72.7 ^a	+ 4.3
Inverness .....	.....	.....	.....	.....	69.2	+ 3.7
Kissimmee	54.0 ^a	— 6.9	.....	.....	71.5 ^c	+ 4.3
Lakeland	59.4	.....	70.4	.....	73.4	.....
Lucerne Park	56.5	.....	68.9	.....	72.3	.....
Malabar	57.2	— 4.6	67.6	+ 4.4	72.2 ^b	+ 5.0
McDonald	54.6	— 3.9	67.6	+ 7.3	71.4	+ 4.8
Merritts Island	56.0	— 6.0	67.8	+ 4.0	71.6	+ 4.4
New Smyrna	51.5	— 6.8	64.6	+ 5.6	69.2	+ 4.7
Ocala	50.3	— 7.0	64.0 ^a	+ 4.7	67.2	+ 2.4
Okeechobee .....	.....	.....	68.6	.....	70.4 ^s	.....
Orange City	53.4 ²	— 5.3	66.0	+ 6.0	69.8	+ 3.9
Orlando	55.4	— 4.4	68.6	+ 7.3	72.6	+ 5.3
Pinellas Park	56.1	.....	67.2	.....	70.0	.....
Plant City	56.9	— 3.6	69.4	+ 7.7	69.8	+ 2.3
Rockwell .....	.....	.....	66.7 ^a	+ 8.8	71.1 ^a	+ 6.1
St. Cloud	55.6	.....	68.3	.....	70.7	.....
St. Leo	55.0	— 4.9	67.4	+ 6.5	69.7	+ 2.5
St. Petersburg	57.3	.....	68.8	.....	72.7	.....
Sanford	54.2	.....	66.8	.....	70.8	.....
Tampa	56.2	— 3.9	68.4	+ 6.1	71.8	+ 5.5
Tarpon Springs	55.4	— 3.6	67.3	+ 6.2	70.2	+ 4.6
Titusville	54.4	— 5.8	66.6	+ 4.9	71.8	+ 6.6
Southern Division.						
Arcadia	55.2	— 7.3	.....	.....	.....	.....
Avon Park	58.5	— 3.5	68.7	+ 5.6	71.3	+ 3.3
Boca Grande .....	.....	.....	.....	.....	72.9 ^s	.....
Bradentown	57.0	— 3.6	67.5	+ 5.3	70.0	+ 3.8
Davie	61.2	.....	68.6	.....	70.4	.....
Fort Lauderdale	62.2	.....	70.5	.....	72.1 ^s	.....
Fort Myers	59.6	— 3.7	69.3	+ 4.4	71.0	+ 2.3
Griffin	61.0	.....	68.3	.....	71.4	.....
Homestead	62.4	.....	69.4	.....	71.8	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	January.		February.		March.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
Hypoluxo	61.9	— 4.1	70.9	+ 4.2	72.6	+ 2.3
Key West	66.4	— 2.4	73.1	+ 2.3	75.5	+ 2.7
Long Key	65.7	.....	73.7	.....	75.9	.....
Miami (1)	62.8	— 4.5	70.4	+ 1.6	72.4	+ 0.4
Miami (2)	63.3	.....	71.8	.....	72.7	.....
Moore Haven .....	.....	.....	.....	.....	.....	.....
Punta Gorda	58.6	.....	70.7	.....	71.7	.....
Ritta	61.6 ^a	.....	.....	.....	71.0	.....
Sand Key	67.0	.....	72.2	.....	75.0	.....
Western Division.						
Apalachicola	48.8	— 6.2	.....	.....	67.8	+ 6.3
Bonifay	47.4 ^b	— 5.3	61.6	+ 7.7	65.6	+ 1.6
DeFuniak Springs	45.4	— 6.3	60.1	+ 7.4	65.2	+ 3.8
Garniers (near)	46.8	.....	60.0 ^b	.....	64.4 ^b	.....
Marianna	45.4	— 6.5	60.3	+ 8.2	65.6	+ 4.5
Molino	49.5 ^b	— 2.6	62.2 ^b	+ 8.9	.....	.....
Pensacola	47.4	— 4.9	59.8	+ 4.3	65.0	+ 3.9
St. Andrews	44.8	— 7.4	.....	.....	.....	.....
Wausau	47.4	— 4.1	61.3	+ 8.2	62.7 ^b	+ 1.2

Small figures indicate number of days missing from report.

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	April.		May.		June.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Northern Division.						
Archer	66.6	— 2.0	74.8	— 0.8	80.2	0.0
Bristol	63.9	.....	73.4	.....	79.7	.....
Camp Johnson .....	.....	.....	76.0 ¹	.....	81.1	.....
Carrabelle .....	.....	.....	73.2	— 2.0	79.4	— 0.9
Cedar Keys	67.0	— 2.7	75.2	— 0.7	80.4	— 0.2
Crescent City	67.3	— 1.9	73.8	— 2.6	80.0	— 0.4
Federal Point	68.6	+ 0.3	74.4	— 0.3	81.0	+ 1.8
Fenholloway	66.6	.....	74.2	.....	81.4	.....
Fernandina	66.4	+ 1.1	74.0 ¹	0.0	80.0	+ 0.7
Gainesville	67.0	— 2.2	74.6	— 1.8	80.4	— 0.3
Hilliard	68.0	.....	73.6 ²	.....	77.2	.....
Jacksonville	67.0	— 0.6	74.2	0.0	79.8	+ 0.8
Jasper	67.1	+ 0.1	74.2	— 0.7	80.9	+ 1.8
Johnstown	66.8 ²	— 1.1	73.0	— 1.8	79.6	— 0.4
Lake City	66.8	— 2.0	75.0	— 0.6	81.4	+ 1.5
Live Oak .....	.....	.....	.....	.....	.....	.....
Macclenny	67.1 ¹	— 0.1	73.8 ¹	— 1.1	.....	.....
Madison	66.4 ²	— 2.0	75.6	— 0.2	81.8	+ 1.4
Middleburg	66.7 ¹	— 0.5	74.0 ¹	+ 0.2	80.6 ²	+ 1.3
Monticello	64.1	— 3.4	72.9	— 2.4	78.6	— 1.5
Morton's Farm	66.0	.....	72.5	.....	79.4	.....
Mount Pleasant	65.2 ¹	— 2.0	74.0	— 0.9	80.6	+ 1.7
Old Town .....	.....	.....	.....	.....	81.4 ²	.....
Quincy	64.6	.....	73.2	.....	80.9	.....
St. Augustine	66.8	— 1.5	72.6	— 1.4	79.0	+ 0.0
Satsuma Heights	69.2	.....	76.6	.....	82.1	.....
Switzerland	67.2 ¹	— 0.7	73.3 ¹	— 1.4	79.2 ²	+ 0.4
Tallahassee	64.8	— 2.3	74.6	0.0	81.0	+ 1.9
Central Division.						
Bartow	71.4	+ 0.1	75.0	— 1.9	80.2	— 0.2
Brooksville (1)	69.0	— 1.1	77.8	+ 1.1	79.0 ¹	— 1.1
Brooksville (2)	68.2	.....	73.6	.....	79.4	.....
Bushnell (near) .....	.....	.....	75.7	.....	81.6 ²	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	April.		May.		June.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Clermont	72.8	+ 0.4				
DeLand	70.6	+ 2.1	75.2	— 0.1	81.4	+ 2.4
Eustis	70.5	— 0.5	75.9	— 1.5	82.0	+ 1.1
Fellsmere	68.8		71.7		78.3	
Fort Meade			75.9	— 0.7	80.8	+ 1.3
Fort Pierce	73.0	+ 1.5	77.1	+ 1.3	80.5	+ 1.4
Inverness	68.6	— 1.0	75.6	— 0.5	80.6	+ 0.6
Kissimmee	71.6	+ 0.0	76.4	— 1.1	82.0 ¹	+ 1.6
Lakeland	72.4		76.4		80.8	
Lucerne Park	71.8		76.3		81.7	
Malabar	71.4 ²	0.0	78.0 ¹	+ 1.6	81.4	+ 1.7
McDonald	70.0	— 0.4	74.9	— 1.7	80.4	— 0.2
Merritts Island	70.7	— 0.9	76.8	+ 0.5	80.0	+ 0.5
New Smyrna	67.8	— 0.7	72.8	— 1.1	78.5	+ 0.1
Ocala	66.6	— 3.1	73.4	— 2.7	80.0	+ 0.1
Okeechobee	90.9 ¹		83.2 ^{2a}			
Orange City	69.0	— 1.0			79.8	— 0.7
Orlando	71.4	+ 0.4	75.5	— 1.4	81.0	+ 0.6
Pinellas Park	70.6		75.6		80.4	
Plant City	68.8	— 2.1	74.8 ¹	— 1.9	81.4	+ 1.1
Rockwell	69.0 ²	— 0.6			82.6 ¹	+ 2.3
St. Cloud	71.2		76.1		80.6	
St. Leo	69.2	— 1.6	74.1	— 3.1	79.4	— 1.0
St. Petersburg	72.2		77.5		81.6 ¹	
Sanford	69.2		75.2		80.8	
Tampa	71.2	+ 0.2	76.4	0.0	81.6	+ 1.6
Tarpon Springs	70.2	— 0.1	76.1	+ 0.5	81.3	+ 1.6
Titusville	70.2	+ 0.5	75.0	— 0.2	79.8	+ 0.8
Southern Division.						
Arcadia						
Avon Park	71.4	— 0.7	75.8	— 1.5	79.9	0.0
Boca Grande	74.2					
Bradentown	71.2	+ 0.7	75.9	— 0.2	80.2	+ 0.4
Davie	71.8		74.6		77.8	
Fort Lauderdale	72.6		76.0		79.4	
Fort Myers	71.2	— 1.2	75.4	— 1.7	79.3	— 0.7

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	April.		May.		June.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Griffin			74.6			
Homestead	74.0		75.7		80.6	
Hypoluxo	73.0	0.0	76.8	- 0.4	79.2	- 0.2
Key West	76.7	+ 1.2	77.8	- 1.2	82.0	- 0.2
Long Key	77.2		78.6		83.1	
Miami (1)	73.6	- 0.6	76.2	- 2.4	79.4	- 1.0
Miami (2)	74.4		78.0		80.5	
Moore, Haven			76.4		80.1	
Punta Gorda			76.8			
Ritta	72.2		75.6		78.7	
Sand Key	75.6		76.6		81.2	
Western Division.						
Apalachicola	65.8	- 2.0	74.9	- 1.0	81.0	+ 0.6
Bonifay	64.4	- 2.5	74.2	0.0	81.4	+ 2.0
DeFuniak Springs	63.9	- 2.0	74.6	+ 0.4	82.2	+ 2.5
Garniers (near)	62.6		70.3		77.6	
Marianna	64.2	- 1.9	75.0	+ 0.5	81.0	+ 1.3
Molino						
Pensacola	63.6	- 4.1	73.2	- 1.6	80.1	+ 0.1
St. Andrews			73.4	- 1.7	80.2	- 0.7
Wausau	64.8	- 1.5	74.8	- 0.7	82.2	+ 1.7

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	July.		August.		September.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Northern Division.						
Archer	78.7	— 3.0	80.1	— 1.1	76.2	— 2.8
Bristol	79.0	.....	78.2	.....	72.8	.....
Camp Johnson	80.4	.....	83.0	.....	78.1	.....
Carrabelle	80.3	— 1.6	80.5	— 0.9	75.8	— 2.7
Cedar Keys	80.8	— 1.5	82.4	+ 0.6	79.4	— 0.1
Crescent City	80.7	— 1.4	82.0	+ 0.1	78.0	— 1.4
Federal Point	81.4	+ 0.2	82.8	+ 1.6	78.2	— 0.3
Fenholloway	79.2	.....	80.4	.....	76.3	.....
Fernandina	80.0	— 1.3	82.0	+ 1.0	76.8	— 1.4
Galnesville	79.2	— 2.5	81.0	— 0.7	76.9	— 1.8
Hilliard	78.2	.....	81.2	.....	75.4	.....
Jacksonville	79.0	— 1.9	81.2	+ 1.1	75.8	— 1.5
Jasper	79.1	— 2.2	.....	.....	.....	.....
Johnstown	77.7 ³	— 3.9	80.2 ¹	— 1.2	76.2 ¹	— 2.7
Lake City	79.3	— 1.6	81.4	+ 0.5	76.4	— 2.0
Live Oak .....	.....	.....	82.4	+ 0.8	78.2 ¹	— 0.3
Macleenny	79.0 ¹	— 2.7	81.6	0.0	76.5	— 2.1
Madison	80.2	— 1.2	81.7	+ 0.2	76.8 ²	— 2.1
Middleburg	79.6 ¹	— 2.0	81.4 ³	+ 0.3	76.2 ¹	— 2.2
Monticello .....	.....	.....	.....	.....	.....	.....
Morton's Farm .....	.....	.....	.....	.....	.....	.....
Mount Pleasant	78.8	— 1.4	79.2	— 1.0	73.3	— 4.2
Old Town	78.9	.....	81.0	.....	76.7	.....
Quincy	79.4	.....	80.0	.....	73.4	.....
St. Augustine	78.8	— 2.1	80.4	— 0.3	77.6	— 1.0
Satsuma Heights	80.6	.....	82.8	.....	77.8	.....
Switzerland	78.8	— 1.6	81.4 ¹	+ 0.9	76.2 ¹	— 1.6
Tallahassee	80.9	+ 0.5	81.6	+ 1.8	75.3	— 1.3
Central Division.						
Bartow	80.3	— 1.2	81.0	— 0.4	78.0	— 1.7
Brooksville (1) .....	.....	.....	.....	.....	.....	.....
Brooksville (2)	78.8	.....	80.2	.....	76.8	.....
Bushnell (near)	81.0	.....	.....	.....	79.0	.....
Clermont .....	.....	.....	.....	.....	.....	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	July.		August.		September.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Deland	81.0	+ 0.4	83.0	+ 2.4	79.2	+ 0.5
Eustis	81.2	— 1.2	83.0	+ 0.7	78.4	— 1.4
Fellsmere	77.8	.....	78.4	.....	76.4	.....
Fort Meade	80.2	— 0.6	81.9	+ 0.6	78.8	— 0.9
Fort Pierce	81.6	+ 1.0	82.5	+ 1.5	80.2	+ 0.3
Inverness	79.7	— 1.0	81.6	+ 0.7	77.3	— 1.7
Kissimmee	81.0	— 1.1	82.4	+ 0.2	79.4	— 0.9
Lakeland	80.8	.....	81.7	.....	79.1	.....
Lucerne Park	80.8	.....	82.4	.....	79.4	.....
Malabar	81.6 ²	+ 0.0	82.8	+ 0.9	80.1 ²	+ 0.3
McDonald	79.8	— 2.0	82.2	+ 0.7	77.6	— 1.6
Merritts Island	80.0	— 1.3	81.2	— 0.8	78.6	— 1.5
New Smyrna	79.0	— 0.9	79.6	— 0.4	77.0	— 1.7
Ocala	77.6 ¹	— 3.8	78.9	— 2.4	74.8	— 4.0
Okeechobee .....	.....	.....	.....	.....	.....	.....
Orange City	79.6	— 2.6	81.5	— 0.3	77.2	— 2.4
Orlando	80.1	— 2.0	82.2	+ 0.1	78.8	— 0.7
Pinellas Park	80.9	.....	81.6	.....	78.5	.....
Plant City	81.8	+ 0.6	82.9	+ 1.6	78.0	— 1.5
Rockwell	81.1 ²	— 0.9	83.6 ¹	+ 1.9	79.4 ²	— 0.8
St. Cloud	78.8	.....	80.3	— 1.1	77.1	— 2.5
St. Leo	78.8	— 2.6	80.3	— 1.1	77.1	— 2.5
St. Petersburg	82.4	.....	83.0	.....	80.4	.....
Sanford	79.6	.....	81.4	.....	77.6	.....
Tampa	81.5	+ 0.3	82.5	+ 1.1	79.4	— 0.3
Tarpon Springs	81.3	+ 0.3	81.6	+ 0.4	78.8	— 0.8
Titusville	80.1	— 0.9	81.2	0.0	78.5	— 1.0
Southern Division.						
Arcadia .....	.....	.....	.....	.....	.....	.....
Avon Park	80.0	— 1.6	80.9	— 0.8	78.6	— 1.6
Boca Grande	83.4	.....	83.5	.....	81.2	.....
Bradentown	81.2	+ 0.3	81.7	+ 0.5	.....	.....
Davie	79.5	.....	79.9	.....	77.9	.....
Fort Lauderdale	80.6	.....	82.4	.....	79.8	.....
Fort Myers	80.8	— 0.1	81.0	— 0.1	79.2	+ 0.7
Griffin .....	.....	.....	.....	.....	.....	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	July		August.		September	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Homestead	80.2	—	81.0	—	80.3	—
Hypoluxo	80.4	— 1.1	82.4	+ 0.8	79.9	— 0.9
Key West	83.5	— 0.2	84.4	+ 0.6	82.6	+ 0.1
Long Key	83.8	—	84.0	—	82.8	—
Miami (1)	80.4	— 1.5	81.5	— 0.5	79.5	— 2.0
Miami (2)	80.8	—	83.2	—	81.0	—
Moore Haven	80.6	—	81.0	—	78.0	—
Punta Gorda	—	—	—	—	—	—
Ritta	80.5	—	84.4	—	79.4	—
Sand Key	82.4	—	82.0	—	81.7	—
Western Division.						
Apalachicola	80.4	— 1.5	81.0	— 0.7	76.6	— 2.8
Bonifay	80.8	— 0.1	81.0	— 0.8	75.2	— 3.2
DeFuniak Springs	81.0	+ 0.4	80.4	— 0.4	—	—
Gardners (near)	78.7	—	80.6	—	73.5	—
Marianna	80.3	— 0.7	80.5	— 0.7	73.7	— 4.3
Molino	—	—	81.4	+ 0.9	73.8	— 3.6
Pensacola	79.4	— 2.0	79.9	— 1.1	74.3	— 3.6
St. Andrews	78.8	— 3.5	79.6	— 2.2	73.6	— 5.5
Wausau	80.9	— 1.0	80.8	— 0.9	74.0	— 4.0

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Mean Temperatures for the Year 1918, with
 Departures from the Normal—Continued.

Stations.	October.		November.		December.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Northern Division.						
Archer	76.2	+ 4.6				
Bristol	72.4					
Camp Johnson	75.7		61.8		58.4	
Carrabelle	75.6	+ 4.8	59.6	- 2.1	56.1	+ 1.9
Cedar Keys	78.9	+ 6.3	64.7	+ 1.0	58.9	+ 0.5
Crescent City	76.5	+ 4.3	64.8	+ 0.1	60.2	+ 2.0
Federal Point	76.3	+ 4.4	64.3	+ 0.3	60.7	+ 3.3
Fenholloway	76.0		59.0		56.9	
Fernandina	75.2	+ 3.8	61.3	- 0.9	57.4 ¹	+ 1.4
Gainesville	76.2	+ 4.8	61.7	- 1.3	57.8	+ 1.4
Hilliard	79.5		59.0		58.0 ³	
Jacksonville	74.5	+ 4.9	60.4	- 0.9	58.2	+ 3.0
Jasper	74.4 ²	+ 3.6	60.2 ¹	- 1.3	57.2 ¹	+ 2.5
Johnstown	74.9	+ 5.1	59.4	- 2.2	56.8	+ 0.8
Lake City	76.5	+ 6.1	60.6	- 2.2	57.4	+ 2.6
Live Oak						
Macclenny	74.6	+ 4.5	59.1	- 1.7	56.4	+ 2.1
Madison	74.5 ⁴	+ 4.2	58.6 ²	- 2.3	57.2 ⁶	+ 3.0
Middleburg						
Monticello						
Morton's Farm						
Mount Pleasant			57.2	- 2.1	54.4	+ 1.0
Old Town	76.6		60.9 ³		57.3	
Quincy	73.8		57.4		55.4	
St. Augustine	75.8	+ 3.4	65.0	+ 0.8	60.0	+ 2.4
Satsuma Heights	76.9		63.6		62.1 ⁴	
Switzerland	75.2 ¹	+ 4.7	61.2 ¹	- 1.2	57.2 ³	+ 1.4
Tallahassee	74.2	+ 5.8	58.3	- 1.2	55.1	+ 2.2
Central Division.						
Bartow	77.4	+ 3.4	67.0	+ 0.5	62.0	+ 0.6
Brooksville (1)						
Brooksville (2)	76.0		63.4		59.6	
Bushnell (near)						
Clermont	78.2	+ 3.3	67.6	+ 0.1	62.8	+ 1.7

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Mean Temperatures for the Year 1918, with
 Departures from the Normal—Continued.

Stations.	October.		November.		December.	
	Temperature	Departure.	Temperature	Departure.	Temperature	Departure.
DeLand	77.0	+ 5.0	64.6	+ 0.2	60.4	+ 1.7
Eustis	76.7	+ 3.4	65.0	— 0.6	60.2	+ 0.3
Fellsmere	75.3	.....	66.8	.....	.....	.....
Fort Meade	77.6	+ 3.5	67.0	+ 0.1	62.8	+ 3.0
Fort Pierce	79.0	+ 2.7	71.2	+ 1.8	65.8	+ 1.4
Inverness	76.8	+ 4.2	62.9	— 0.2	59.1	+ 2.3
Kissimmee	77.6	+ 2.7	67.1	— 0.3	62.5	+ 1.3
Lakeland	77.9	.....	67.0	.....	62.9	.....
Lucerne Park	78.0	.....	.....	.....	63.0	.....
Malabar	79.6	+ 4.1	70.2	+ 1.5	64.4	+ 1.2
McDonald	76.8	+ 3.9	65.0	— 0.6	60.8	+ 1.6
Merritts Island	77.8	+ 2.3	68.5	+ 0.1	63.8	+ 0.8
New Smyrna	75.8	+ 2.7	65.0	— 0.2	59.6	+ 1.0
Ocala	74.0	+ 2.0	61.3	— 2.5	57.6	0.0
Okeechobee .....	.....	.....	.....	.....	63.4	.....
Orange City	75.3	+ 2.0	63.8	— 0.9	60.0	+ 0.7
Orlando	77.0	+ 3.3	66.8	+ 0.3	62.1	+ 1.5
Pinellas Park	77.6	.....	67.2	.....	63.3	.....
Plant City	78.4	+ 4.6	.....	.....	60.7	+ 0.1
Rockwell .....	.....	.....	.....	.....	.....	.....
St. Cloud .....	.....	.....	.....	.....	.....	.....
St. Leo	76.0	+ 2.6	64.6	— 1.5	60.4	+ 0.5
St. Petersburg	78.8	.....	68.4	.....	64.1	.....
Sanford	76.4	.....	65.6	.....	60.3	.....
Tampa	77.9	+ 4.1	67.2	+ 0.4	62.6	+ 1.4
Tarpon Springs	77.9	+ 4.6	66.0	+ 0.3	62.0	+ 2.1
Titusville	77.6	+ 3.9	66.6	+ 0.2	61.4	— 0.2
Southern Division.						
Arcadia .....	.....	.....	.....	.....	.....	.....
Avon Park	77.1	+ 2.2	68.8	+ 0.9	63.6	+ 0.8
Boca Grande .....	.....	.....	.....	.....	66.0	.....
Bradentown	78.0	+ 3.9	67.5	+ 0.4	63.6	+ 2.0
Davie	77.2	.....	70.8	.....	65.8	.....
Fort Lauderdale	79.6	.....	72.9	.....	68.4	.....
Fort Myers	78.2	+ 2.9	70.3	+ 0.7	65.4	+ 1.1
Griffin .....	.....	.....	71.8	.....	66.5	.....

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	October.		November.		December.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Homestead	80.3	.....	71.8	.....	66.4	.....
Hypoluxo	78.7	+ 1.2	73.2	+ 0.8	68.0	— 0.3
Key West	80.0	+ 1.3	75.4	+ 1.1	71.7	+ 1.6
Long Key	80.2	.....	74.6	.....	70.6	.....
Miami (1)	78.9	+ 1.1	72.2	+ 0.2	67.8	— 0.2
Miami (2)	80.3	.....	73.6	.....	68.8	.....
Moore Haven .....	.....	.....	.....	.....	.....	.....
Punta Gorda .....	.....	.....	.....	.....	.....	.....
Ritta	78.4	.....	70.5	.....	66.8	.....
Sand Key .....	.....	.....	.....	.....	.....	.....
Western Division.						
Apalachicola	76.0	+ 4.9	60.5	— 1.6	55.5	+ 0.2
Bonifay	73.5	+ 5.3	58.7	— 0.7	55.2	+ 3.2
DeFuniak Springs .....	.....	.....	.....	.....	.....	.....
Garniers (near)	74.0	.....	57.7	.....	.....	.....
Marianna	72.9	+ 4.9	57.0	— 1.4	55.4	+ 2.2
Molino	74.7	+ 7.5	.....	.....	.....	.....
Pensacola	73.5	+ 4.1	59.4	— 0.2	55.4	+ 1.5
St. Andrews	72.6	+ 2.6	58.6	+ 1.2	54.0	+ 0.8
Wausau	73.8	+ 5.4	57.2	— 1.4	54.4	+ 2.0

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Mean Temperatures for the Year 1918, with
 Departures from the Normal—Continued.

Stations.	Annual.	
	Temperature.	Departure.
Northern Division.		
Archer		
Bristol		
Camp Johnson		
Carrabelle		
Cedar Keys		
Crescent City	71.0	+ 0.7
Federal Point	71.2	+ 1.6
Fenholloway	69.1	
Fernandina	69.0	+ 0.5
Gainesville	69.8	+ 0.1
Hilliard	69.1	
Jacksonville	69.2	+ 1.0
Jasper		
Johnstown	68.8	— 0.1
Lake City	69.1	+ 0.1
Live Oak		
Maccleenny		
Madison	69.0	+ 0.3
Middleburg	69.1	+ 0.8
Monticello		
Morton's Farm		
Mount Pleasant		
Old Town		
Quincy	67.7	
St. Augustine	69.7	+ 0.3
Satsuma Heights	71.8	
Switzerland		
Tallahassee	68.3	+ 1.1
Central Division.		
Bartow	72.3	+ 0.3
Brooksville (1)		
Brooksville (2)	70.4	
Bushnell (near)		

CLIMATOLOGICAL DATA—Continued.
Monthly and Annual Mean Temperatures for the Year 1918, with
Departures from the Normal—Continued.

Stations.	Annual.	
	Temperature.	Departure.
Clermont		
DeLand	71.9	+ 1.8
Eustis	72.1	+ 0.5
Fellsmere		
Fort Meade		
Fort Pierce	74.3	+ 1.5
Inverness		
Kissimmee		
Lakeland	73.5	
Lucerne Park		
Malabar	73.9	+ 1.3
McDonald	71.8	+ 0.7
Merritts Island	72.7	+ 0.2
New Smyrna	70.0	+ 0.2
Ocala	68.8	— 1.4
Okeechobee		
Orange City		
Orlando	72.6	+ 0.9
Pinellas Park	72.4	
Plant City		
Rockwell		
St. Cloud		
St. Leo	71.0	— 0.5
St. Petersburg	73.9	
Sanford	71.5	
Tampa	73.1	+ 1.4
Tarpon Springs	72.3	+ 1.3
Titusville	71.9	+ 0.7
Southern Division.		
Arcadia		
Avon Park	72.9	+ 0.3
Boca Grande		
Bradentown		
Davle	73.0	
Fort Lauderdale	74.7	
Fort Myers	73.4	+ 0.3

CLIMATOLOGICAL DATA—Continued.
 Monthly and Annual Mean Temperatures for the Year 1918, with
 Departures from the Normal—Continued.

Stations.	Annual.	
	Temperature.	Departure.
Griffin		
Homestead	74.5	
Hypoluxo	74.8	+ 0.2
Key West	77.4	+ 0.6
Long Key	77.5	
Miami (1)	74.6	- 0.8
Miami (2)	75.7	
Moore Haven		
Punta Gorda		
Ritta		
Sand Key		
Western Division.		
Apalachicola	68.2	+ 0.6
Bonifay	62.2	+ 0.6
DeFuniak Springs		
Garniers (near)		
Marianna	67.6	+ 0.5
Molino		
Pensacola	67.6	- 0.3
St. Andrews		
Wausau	67.9	+ 0.4

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Fifteenth Biennial Report
of the
Department of Agriculture
of the
State of Florida

Division of Agriculture and Immigration

**Part 2—Census of Manufactures
and Industries**

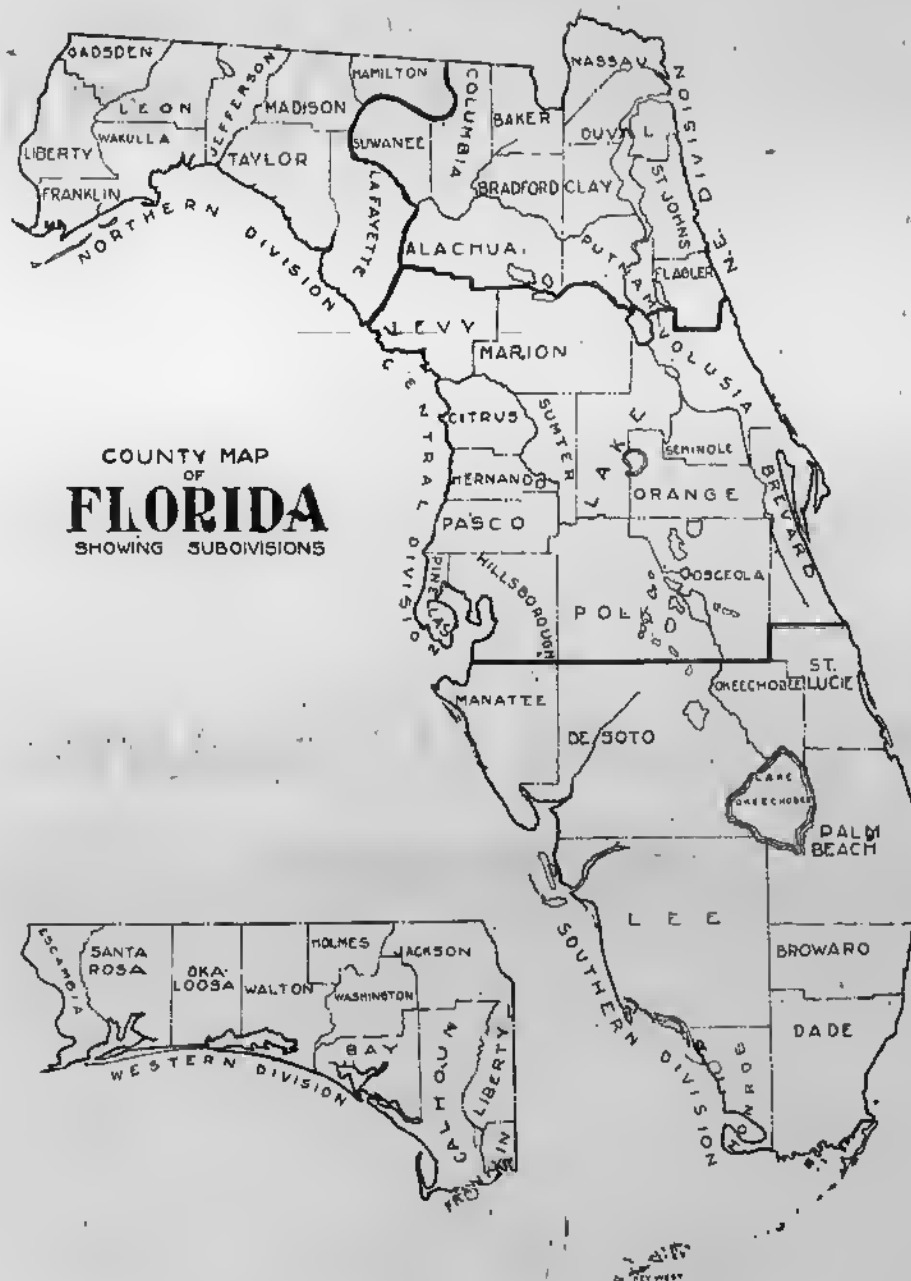
FOR THE YEAR
1917

W. A. McRAE
Commissioner of Agriculture
Tallahassee, Florida



T. J. Appleyard, Printer, Tallahassee, Fla.





LETTER OF TRANSMITTAL

To His Excellency,

S. J. CATTS,

Governor of the State of Florida.

Sir:

As provided by law, I herewith submit the Biennial Report of the Department of Agriculture for the years 1917-18. The dates upon which the manufacturing and industrial statistics are based cover the period from January 1, 1917, to December 31, 1917, inclusive.

Respectfully submitted,

W. A. McRAE,

Commissioner of Agriculture.

MANUFACTURES

For the Calendar Year Beginning January 1, 1917, and Ending December 31, 1917

The information usually most sought for in connection with manufacturing and industrial work is contained in the following tables, the heads of which clearly express the meaning of each.

No better advertisement of a State or county can be made than the publication of its industrial progress and development, and to those interested in such matters and who wish information relative to the possibilities of investments in such lines of activity in this State, the statistics contained herein are well worth careful perusal.

We beg to direct attention to the classified tables by counties. The results there disclosed are of unusual interest and show plainly the results of the past two years. All of the counties are noticeable for their progress and development in industrial work.

TABLE No. 1—Shows a general classification of all industries reported in the State. The selections of the several classes of industries were arranged according to their value as principal products. Also products for a given industry may, on the one hand, include one or more minor products very different from those covered by the class designated, and also may not include the total product covered by this designation, for the reason that some portion of this product may be made in other classes or establishments in which it is not the product of principal value. Thus it would be noted that the portions of one class of products are combined in the class of some other product. This is unavoidable, because in many establishments several products belonging to widely different classes are manufactured in the same establishment by the same power and working force. Oftener than otherwise under such conditions no separate accounts are kept. This explains the difficulty and impossibility of a strict classification.

TABLE No. 2—Shows the number of establishments reporting, capital invested, average number of wage earners and the total wages paid by the counties, the average number of wage earners of specified ages, the amount of wages paid each, and the greatest and smallest number of each class employed during the year, cost of material and value of all of the products of industry of the several counties. The quantities and value of manufactured tobacco and kinds of products manufactured, the output and value of naval stores (Turpentine and Resin) for the year 1915; the products of ginneries of the State, pounds of cotton of both staple. The number of gins is found in the classified list by counties.

TABLE No. 3—Shows the industries by counties, giving the number in each county, the aggregate amount of capital invested in each class, the average number of wage earners and their total wages; the average number of persons engaged in these industries of specified ages, and wages paid them; the largest and smallest number engaged in each industry; the cost of manufacture, and the value of the products of each of the industries by counties.

The following is a list of the County Enumerators, and their postoffice addresses, who performed the field work in gathering the agricultural, horticultural, live stock, manufacturing and industrial statistics of the several counties. The results of this work is found in the tables that follow.

COUNTY	NAME	POSTOFFICE
1. Alachua.....	E. G. Spencer.....	Alachua, Fla.
2. Baker.....	J. W. Dowling.....	Macclenny, Fla.
3. Bay.....	C. C. Mahlis.....	Panama City, Fla.
4. Bradford.....	H. A. Green.....	Starke, Fla.
5. Brevard.....	Chas. H. Nelson, Jr.....	Tillemville, Fla.
6. Broward.....	Robert J. Reed.....	Ft. Lauderdale, Fla.
7. Calhoun.....	John R. Richards.....	Blountstown, Fla.
8. Citrus.....	J. W. Knight.....	Inverness, Fla.
9. Clay.....	J. M. Williams.....	Green Cove Spgs., Fla.
10. Columbia.....	Donald Tompkins.....	Lake City, Fla. (R.F.D.)
11. Dade.....	M. W. Goode.....	Lemon City, Fla.
12. DeSoto.....	J. Edgar Albritton.....	Arcadia, Fla.
13. Duval.....	Chas. H. Thebaut.....	Jacksonville, Fla.
14. Escambia.....	Wm. J. Scott.....	R.F.D. "A", Almore, Fla.
15. Flagler.....	E. A. Rich.....	Bunnell, Fla.
16. Franklin.....	W. J. Lovett.....	Apalachicola, Fla.
17. Gadsden.....	D. J. Mears.....	Hardaway, Fla.
18. Hamilton.....	L. R. Taylor.....	Jasper, Fla.
19. Hernando.....	Leroy McKeown.....	Brooksville, Fla.
20. Hillsborough.....	Iren L. Blackburn.....	Tampa, Fla.
21. Holmes.....	D. J. Gries.....	Rodney, Fla.
22. Jackson.....	J. M. Blount.....	Grand Ridge, Fla.
23. Jefferson.....	W. B. Bishop.....	Lloyds, Fla.
24. Lafayette.....	J. P. Abbott.....	Mayo, Fla.
25. Lake.....	Waller H. Bell.....	Tavares, Fla.
26. Lee.....	John M. Borling.....	Fort Myers, Fla.
27. Leon.....	W. J. Johnson.....	Charles, Fla.
28. Levy.....	M. D. Graham.....	Bronson, Fla.
29. Liberty.....	Wm. A. Deason.....	Bristol, Fla.
30. Madison.....	H. H. Fox.....	Madison, Fla.
31. Manatee.....	W. M. Baxter.....	Bradentown, Fla.
32. Marion.....	M. L. Payne.....	Hedrick, Fla.
33. Monroe.....	Chas. W. Chase.....	Key West, Fla.
34. Nassau.....	W. W. Word.....	Bonlogne, Fla.
35. Okaloosa.....	L. R. Davis.....	Okaloosa, Fla.
36. Orange.....	J. C. Merrill.....	Plymouth, Fla.
37. Osceola.....	Milton Medger.....	Kissimmee, Fla.
38. Okaloosa.....	W. W. Hurlston.....	Laurel Hill, Fla.
39. Palm Beach.....	W. C. C. Branning, Jr.....	West Palm Beach, Fla.
40. Pasco.....	J. H. Pike.....	San Antonio, Fla.
41. Pinellas.....	A. C. Turner.....	Clearwater, Fla.
42. Polk.....	J. E. Bryant.....	Kothleen, Fla.
43. Putnam.....	Julien de Nazario.....	Palatka, Fla.
44. Santa Rosa.....	Paulson Jerulean.....	Millon, Fla.
45. Seminole.....	A. R. Crappell.....	Sanford, Fla.
46. St. Johns.....	John W. Dals.....	St. Augustine, Fla.
47. St. Lucie.....	F. Sent Waters.....	Walton, Fla.
48. *Sumter.....	J. H. Wilkerson.....	Wildwood, Fla.
49. Suwannee.....	H. E. Carter.....	Live Oak, Fla.
50. Taylor.....	W. K. Vann.....	Shady Grove, Fla.
51. Volusia.....	Otto H. Kirschhoff.....	Holton Springs, Fla.
52. Wakulla.....	John McKenzie.....	Sanford, Fla.
53. Walton.....	D. L. Colum.....	DeFuniak Springs, Fla.
54. Washington.....	E. M. Huns.....	Vernon, Fla.

*Not reported.

PREFACE.

In the publication of a report that will give the best results, we find it necessary to present each branch or division of the Department separately, treating each subject or division separate and distinct from the other. We therefore publish the report of each division under separate cover.

In order that the public may realize the magnitude and importance of the work of the Department of Agriculture, we give below an outline of the duties of the Commissioner of Agriculture.

1. Divisions of Agriculture and Immigration.
2. The Prison Division.
3. The Pure Food and Drugs, Stock Feed and Fertilizer Division.
4. The Land Division.
5. The Field Note Division.
6. Shell Fish Commission.

In addition to the above, the Commissioner of Agriculture is a member of the following Boards:

1. The Board of Commissioners of State Institutions.
2. The Board of Pardons.
3. The Trustees of the Internal Improvement Fund.
4. The Board of Drainage Commissioners.

Feed Crushers	1	2,850	9	1,600	9	1,600																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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TABLE NO. 1—MANUFACTURES—CLASSIFICATION OF ALL INDUSTRIES.

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (Including Lands, Buildings, Improvements, Machinery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 10 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
Cotton Gins	82	\$ 565,170	700	\$ 88,888	735	\$ 75,168	54	\$ 8,620	1	\$ 100	464	335
Cotton Gin and Grist Mill	4	8,500	13	4,250	16	4,250					20	8
Naval Stores	307	7,891,910	7,258	2,733,225	6,944	2,614,133	158	74,072	156	21,992	9,656	5,291
Saw Mills	354	14,886,180	12,535	6,494,980	12,298	6,442,464	71	36,968	168	18,450	16,347	9,121
Blacksmith Repair Shops	370	343,093	608	350,861	599	374,341	2	880	5	2,640	750	513
Bottling Works	54	452,750	267	188,082	232	166,058	22	18,302	13	3,722	288	199
Grist Mills	285	310,444	380	78,065	363	75,570	10	2,325	13	750	427	321
Garages and Repair Shops	330	1,185,125	1,121	1,050,194	1,101	1,036,242	18	12,956	2	938	1,392	946
Cigar Manufacturing	206	6,671,219	14,051	11,172,817	10,006	8,774,200	4,020	2,392,909	25	5,708	14,579	13,791
Cigar Box Factory	1	49,000	115	6,300	40	3,600	60	1,800	15	900	250	105
Tobacco Companies	2	106,500	340	89,400	180	73,800	105	11,500	55	4,100	340	175
Plumbing and Repair Shops	63	180,500	273	288,895	260	286,645	4	2,250			323	102
Ice Manufacturing	43	1,718,100	637	481,405	635	480,645	1	520	1	240	685	538
Ice and Cold Storage Plants	7	130,000	53	62,908	58	62,008					60	52
Ice, Water and Light Plants	5	150,487	29	23,464	25	28,404					30	24
Ice and Light Plants	14	1,723,240	208	152,312	200	147,037	5	5,200	3	75	247	174
Electric Light Plants	29	1,277,285	281	181,838	279	159,458	2	2,380			318	232
Gas Plants	6	1,257,000	123	99,406	125	95,806	3	3,600			156	116
Electricity and Sewerage	1	40,000	4	2,200	4	2,200					6	2
Water, Gas and Electric Light Plants	1	230,000	20	12,000	20	12,000					20	20
Electricity, Ice, Gas and Water Plants	8	749,500	100	57,588	100	57,588					113	33
Water Works	14	2,003,076	126	102,477	124	100,605	2	1,872			101	77
Iron Foundries	11	298,100	179	157,775	179	157,775					204	114
Bolt and Nut Manufacturers and Repairs	4	53,000	25	21,000	25	21,000					32	18
Machine Shops	68	986,790	689	658,749	670	645,675	13	9,165			967	662
Bakeries	73	370,150	467	353,080	411	312,172	41	17,736	15	3,172	544	392
Laundries	90	564,015	1,085	520,917	509	321,854	575	194,783	1	150	1,219	823
Bicycle and Repair Shops	74	100,525	113	81,009	111	79,367	2	1,052			129	101
Motorcycle Repair Shops	1	7,500	4	2,800	4	2,800					4	1
Cabinet Shops	14	25,200	40	33,050	40	33,050					56	29
Coffin Manufacturers	1	1,000	2	2,000	2	2,000					4	2
Millinery and Dress-making Shops	235	155,245	498	278,180	111	65,848	362	212,282	25	1,650	583	386
Shoe Shops and Repairs	188	103,655	306	205,550	284	199,490	5	1,068	17	7,992	344	269
General Repair Shops	85	109,650	146	95,124	137	84,724	9	10,400			246	118
Wagon and Carriage Shops and Repairs	18	111,850	103	89,150	103	89,150					125	85
Vulcanizing and Repairing	34	38,300	72	53,720	68	50,444	4	2,996			74	68
Tailoring and Pressing Shops	239	132,510	522	334,672	450	308,713	55	21,528	17	4,438	563	406
Dyeing and Cleaning Works	4	22,700	45	27,500	45	27,500					52	33
Tin Shops	11	22,600	28	29,659	28	29,650					38	24
Jewelry Shops	69	94,950	122	146,092	121	145,260	1	832			135	113
Furniture Repair Shops	33	7,780	48	20,310	41	29,310					50	41
Fertilizer Plants	9	2,773,000	815	303,100	815	303,190					1,141	574
Newspapers and Printing Plants	101	1,372,726	831	764,124	688	665,827	142	98,215	1	200	963	645
Gunsmith Shops	3	1,600	3	2,200	3	2,200					4	3
Locksmith Shops	6	3,350	9	6,200	9	6,200					12	9
Cooper Shops	70	82,150	274	185,412	245	182,412	20	3,000			368	164
Shingle Mills	33	882,525	694	113,930	688	110,930			6	3,000	953	640
Planing Mills	26	341,500	351	232,008	341	218,508	10	13,500			466	247
Brick Manufacturing	8	133,100	86	32,900	86	32,900					128	74
Novelty Works	26	289,700	153	134,902	151	133,202	2	1,700				
Cross Tie Manufacturing	74	51,795	752	295,102	752	295,102					978	468
Auto Painting Shops	6	7,600	9	6,320	9	6,320					13	8
Auto Shipping Blocks	1	6,000	19	4,000	10	4,000					12	8
Sheet Metal Works	14	37,800	101	57,600	101	57,600					142	64
Marine Ways	8	55,300	49	20,800	49	20,800					77	32
Marine Ways and Machine Shops	3	34,000	22	5,200	22	5,200					35	14
Marine Ways and Shipbuilding	10	2,011,500	3,011	570,180	2,091	549,120	20	21,060			3,011	3,911
Shipbuilding and Repairs	55	3,103,095	4,316	3,544,940	4,183	3,467,265	152	77,455	1	280	5,307	314
Feed Mills	7	13,915	12	6,580	12	6,580					14	10
Rice Mills	6	1,450	7	1,770	8	1,770					9	7
Knitting Mills	1	48,000	70	28,100	8	6,200	62	22,000			70	40
Bean and Peanut Hullers	4	10,925	10	1,050	10	1,050					10	9

TABLE NO. 1—MANUFACTURES—CLASSIFICATION OF ALL INDUSTRIES.—(Continued.)

NAME OF BUSINESS MANUFACTURE OR PRODUCT	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valu- ing Manufactured To- bacco or Naval Stores.		Turpenline.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.			Gallons.	Value.	Barrels.	Value.				
Cotton Gins		\$		\$	4,800	8,350					8,484	\$	26,807	\$
Cotton Gin and Grist Mill											104	15,600	1,007	5,636,094
Naval Stores							524,295	13,018,447	414,226	3,200,107				241,686
Saw Mills					14,821,945	32,282,622								
Blacksmith Repair Shops					498,488	1,017,011								
Bottling Works					327,008	690,069								
Grist Mills					253,207	459,419								
Garages and Repair Shops					1,015,945	3,449,584								
Cigar Manufacturing	469,301,042	30,127,041	7,800,000	154,000	187,000	220,000								
Cigar Box Factory					157,375	210,000								
Tobacco Companies					475,400	812,900								
Plumbing and Rep. Shops					1,050,659	3,634,265								
Ice Manufacturing					104,546	187,500								
Ice and Cold Stor. Plants					52,777	86,848								
Ice, Water and Lt. Plants					378,735	519,020								
Ice and Light Plants					157,070	266,275								
Electric Light Plants					150,000	108,000								
Gas Plants					5,200	6,400								
Electricity and Sewerage					52,000	73,000								
Water, Gas & Elec. Lt. Pl.					131,006	199,598								
Elec. Ice, Gas & Wtr. Pl.					116,420	340,200								
Water Works					313,500	415,500								
Iron Foundries					63,000	101,000								
Boiler Makers & Reps.					1,222,154	1,864,461								
Machine Shops					940,738	1,586,352								
Bakeries					696,555	1,130,340								
Laundries					171,618	323,130								
Bicycle & Rep. Shops					113,300	165,400								
Motorcycle Rep. Shops					3,000	4,000								
Coffin Manufacturers					375,618	794,197								
Millinery & Dressmk. Shops					305,320	547,772								
Shoe Shops and Repairs					141,514	236,590								
General Rep. Shops					160,100	230,050								
Wagon & Carriage Shops					144,120	311,325								
Vulcanizing and Repairing					547,240	1,018,175								
Tailoring & Dress Shops					34,300	64,300								
Dying & Cleaning Wks					59,250	88,200								
Tin Shops					227,278	416,558								
Jewelry Shops					50,080	106,850								
Furniture Rep. Shops					3,980,253	4,797,282								
Fertilizer Plants					1,166,955	1,035,295								
Newspaper & Ptg. Plants					2,500	3,700								
Gunsmith Shops					8,200	10,600								
Locksmith Shops					268,929	334,887								
Cooper Shops					779,885	1,099,300								
Shingle Mills					539,550	793,700								
Planing Mills					47,600	89,150								
Brick Manufacturing														
Novelty Works					463,896	1,002,847								
Cross Tie Mfg					6,640	23,040								
Auto Painting Shops					8,500	16,500								
Auto Shipping Blocks					220,950	305,400								
Sheet Metal Works					30,500	62,800								
Marine Ways					50,000	90,000								
Marine Ways & Mch Shops					1,813,300	3,687,200								
Marine Ways & Shipbldg.					643,025	1,181,250								
Shipbuilding and Repairs					15,225	20,100								
Feed Mills					2,900	12,070								
Rice Mills					85,000	110,500								
Knitting Mills					13,000	16,750								
Bean & Peanut Mullers					4,500	19,000								
Feed Crusher					18,500	25,400								
Corn Millers														

TABLE NO. 2—MANUFACTURES—TOTAL FOR STATE BY COUNTIES.—(Continued.)

COUNTIES.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valuing Manufactured Tobacco or Naval Stores.		Turpentine.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Island Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (including Custom Work and Repairing).	Gallons.	Value.	Barrels.	Value.				
Alachua					\$ 888,300	\$ 1,827,800	203,000	\$ 122,400	8,489	\$ 38,809	904	\$ 89,400	9,185	\$ 2,711,450
Baker					114,100	62,850	197,000	140,560	16,750	237,000			1,650	16,500
Bay					1,246,225	1,500,750	412,300	84,320	15,520	108,860			4,290	1,141,120
Bradford	40,000	2,000			260,136	390,464	185,790	73,196	11,889	89,951				
Brevard					584,114	658,915	20,450	8,180	1,150	6,900				
Broward	40,000	1,409			259,700	259,850								
Calhoun					375,506	465,662	326,350	116,998	19,952	162,828	225	33,750	428	107,000
Citrus					76,058	98,800								
*Clay														
Columbia					14,805	30,142	75,500	63,800	27,850	44,425	120	16,700	2,510	280,000
Dade	300,000	10,000												
DeSoto	72,000	21,600			1,063,975	3,941,020	16,000	47,750	6,025	178,600			200	50,000
Duval	317,060	692,797			11,370,654	14,420,624	98,700	44,850	5,807	59,570				
Escambia					2,306,676	2,588,877								
Flagler					165,100	213,800	82,000	41,000	4,550	27,300				
Franklin					923,500	1,390,400	259,315	9,076,025	15,080	106,040				
Gadsden					187,095	200,400	20,500	7,640	1,230	8,300				
Hamilton					119,100	178,850	137,500	54,000	20,310	52,150	25	2,500	4,200	378,000
Hernando					548,000	740,500								
Hillsborough	415,154,000	27,609,055	7,800,000	154,000	11,702,037	30,127,549	82,400	36,000	3,550	45,000				
Holmes					347,738	9,280,510	14,950	8,897	1,552	10,203	2,800	200,000		
Jackson					27,051	80,800	3,802,625	448,754	81,025	544,025	1,322	166,090	768	163,000
Jefferson					158,662	275,385	48,900	26,300	3,251	33,160				
Lafayette					423,200	114,200	23,000	12,000	850	3,400				
Lake					263,049	381,954								
Lee					180,300	285,750								
Leon					741,882	1,379,824	144,200	147,868	9,534	94,482	1,771	178,000		
*Levy														
Liberty					718,450	924,800	303,050	335,896	19,602	158,954				
Madison					163,971	322,833	65,850	498,880	4,050	34,416				
Manatee					229,100	723,100	135,000	43,000	5,400	22,500				
Marion	225,000	10,000			1,207,320	1,420,115	134,000	70,000	6,700	41,200	77	8,425	1,860	430,500
Monroe	42,293,802	1,450	803		311,583	365,737								
Nassau					60,938	104,900	108,000	60,000	4,100	24,600				
Okaloosa					106,757	140,241	56,000	22,230	3,525	28,073	205	26,750		
Okeechobee					449,280	744,500	633	19,000	1,900	38,000				
Orange	2,638,200	94,849			1,903,587	2,109,301	68,000	29,060	4,306	28,487				
Osceola					281,075	410,700								
Palm Beach	51,500	25,750			589,975	744,830								
Pasco	24,000	22,000			3,342,175	4,518,850	310,000	178,000	16,800	29,600	550	57,500	1,500	350,000
Pinellas	475,000	16,680			457,000	618,535	8,945	6,000	670	5,300				
Polk	45,600	17,160			483,260	714,375								
Putnam	6,500	13,000			2,324,180	3,913,600	162,500	81,250	10,300	92,700				
Santa Rosa					531,351	610,302	133,750	47,620	6,270	56,230	20	8,000		
Seminole	500,000	18,500			40,007	57,080	22,508	3,759	3,759	30,072	75	13,000		
St. Johns	3,906,880	110,287			676,021	1,243,720	101,600	57,720	1,750	35,000				
St. Lucie	3,960	4,560			265,214	320,012								
*Sumter														
Suwannee					38,200	58,250	12,745	7,920	1,560	8,614	104	15,600	1,533	385,920
Taylor					89,250	131,750	191,000	505,000	6,850	68,500				
Volusia					1,509,440	3,519,820	60,500	34,450	3,310	62,500				
Wakulla					28,834	42,767	02,000	33,322	5,942	61,013				
Walton	444,112				444,112	1,001,725	504,450	186,628	33,269	323,286				
Washington					420,170	616,800	277,058	197,897	19,815	160,895	400	60,000		
Grand Total	469,301,042	\$30,127,941	7,800,000	\$ 154,000	\$51,058,611	\$95,758,017	8,824,205	\$13,018,447	414,226	\$ 3,260,107	8,508	\$ 868,625	28,104	\$ 5,994,390

*Not reported.

TABLE NO. 2—MANUFACTURES—TOTAL FOR STATE, BY COUNTIES.

COUNTIES.	Number of Establishments.	Capital Invested (Including Lands, Buildings, Improvements, Machinery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
Alachua	140	\$ 1,050,000	683	\$ 358,547	618	\$ 343,947	50	\$ 14,600			728	563
Baker	56	258,150	433	181,580	239	114,280	194	67,300				221
Bay	123	1,093,850	1,050	356,075	1,037	352,725			13	\$ 3,350	5,400	485
Bradford	147	154,050	624	192,429	595	191,099	29	1,330			170	352
Brevard	11	406,310	438	105,400	428	83,452	7	21,357	3	600	182	73
Broward	31	115,875	111	74,850	100	72,250	11	2,600			160	640
Calhoun	41	713,640	803	320,780	761	313,010			42	7,750	985	95
Citrus	7	128,500	130	58,064	110	53,414	20	4,650			187	
*Clay												
Columbia	234	32,704	348	52,002	167	32,602	181	20,300			531	103
Dade	28	2,990,018	839	709,460	817	699,813	22	9,596			987	580
DeSoto	381	2,098,225	2,491	1,565,875	2,491	1,565,875					5,183	1,904
Duval	514	6,275,075	5,876	3,978,894	5,202	3,671,308	614	302,794			1,204	4,860
Escambia	103	4,849,353	5,027	4,067,841	4,660	4,420,715	341	123,155	20	3,552	6,053	780
Flagler	15	112,000	446	284,100	440	284,100					450	406
Franklin	57	1,865,900	1,632	278,850	1,532	274,350	100	4,500			2,128	1,016
Gadsden	39	536,850	493	224,108	475	77,308	18	2,800			1,875	311
Hamilton	68	186,700	453	120,200	437	114,600			16	5,000	505	836
Hernando	14	686,100	484	321,598	484	321,598					391	
Hillsborough	1,082	14,036,965	21,243	15,143,478	16,522	12,302,364	4,660	2,825,038	61	15,456	21,243	21,243
Holmes	21	549,769	436	125,530	436	125,530					631	374
Jackson	48	463,850	250	88,915	236	79,615	14	0,300			281	186
Jefferson	316	326,500	980	115,997	666	98,793			320	17,204	911	1,097
Lafayette	48	1,108,825	1,179	827,147	1,179	827,147					1,350	1,018
Lake	50	559,163	486	202,531	395	197,511	88	4,150	3	870	527	285
Lee	28	490,700	148	21,586	137	19,511	8	2,000	3	75	224	93
Leon	169	895,565	1,693	401,046	1,216	391,394	131	6,593	379	2,977	1,089	583
*Levy												
Liberty	24	302,062	698	308,497	593	357,797			103	10,700	748	454
Madison	53	71,705	328	104,862	328	104,862					441	261
Manatee	46	345,450	353	226,080	350	226,480	3	500			594	246
Marion	137	1,188,150	1,652	607,997	1,388	573,589	264	34,410			1,717	1,206
Monroe	10	1,024,012	1,361	909,414	1,094	791,837	243	74,050	20	2,052	1,795	1,042
Nassau	35	136,950	182	83,056	182	83,050					234	147
Okaloosa	24	134,610	184	52,910	184	52,910					228	115
Okeechobee	13	213,440	264	288,960	264	288,960					339	107
Orange	79	1,880,533	1,016	540,871	916	514,003	96	24,813	4	1,450	1,333	620
Osceola	45	209,275	144	133,850	142	132,350	2	1,500			152	119
Palm Beach	115	467,079	825	539,171	792	496,191	33	17,800			1,010	686
Pasco	218	1,712,870	2,198	858,010	1,826	654,510	220	4,000	47	3,620	2,411	1,500
Pineellas	42	649,350	273	18,795	260	12,910	12	5,050	1	235	423	172
Polk	18	520,300	520	262,135	515	279,355	5	2,780			606	395
Putnam	230	1,854,800	1,095	1,068,380	1,049	1,038,380	46	28,090			2,420	1,698
Santa Rosa	54	1,359,752	1,243	739,098	1,242	738,498	1	900			1,721	744
Seminole	11	287,750	142	65,476	141	65,210	1	260			217	101
St. Johns	85	885,835	577	482,507	500	453,475	68	26,738	3	1,436	663	542
St. Lucie	26	136,215	102	94,523	96	88,971	6	5,290	1	312	141	80
*Sumter												
Suwannee	23	38,275	462	29,450	462	29,450					138	51
Taylor	38	1,445,800	1,660	232,500	1,660	232,500					1,883	827
Volusia	283	2,811,740	2,157	1,205,195	1,940	1,169,515	135	43,000	62	700	2,804	1,187
Wakulla	24	208,020	264	76,121	241	73,629	1	72	22	2,492	355	185
Walton	52	1,524,722	1,481	640,565	1,480	640,465	1	100			1,553	1,409
Washington	37	501,275	1,112	449,930	1,108	449,455	4	475			1,167	989
Grand Total	5,493	\$65,091,746	69,955	\$40,075,087	61,108	\$33,568,283	7,631	\$ 3,604,527	1,114	\$ 80,431	83,379	52,878

*Not reported.

Ice Cream Manufacturing	1	300	1	250	1	250							
Laundry	1	1,500	5	1,500	1	400							
Machine Shops	3	4,500	10	4,000	10	4,000							
Marine Ways	2	1,800	5	1,800	5	1,000							
Millinery Shops	3	2,600	5	1,200	5	1,200							
Novelty Works	1	1,200	2	1,000	2	1,000							
Naval Stores	20	435,000	341	114,850	320	112,650			12	2,000	1,577		98
Plumbing and Repairs	2	1,100	5	2,200	5	2,200							
Planting Mills	5	45,000	37	14,000	37	14,000					57		15
Rice Cleaner	1	500	1	300	1	300							
Shingle Mills	1	5,000	5	1,650	5	1,650							2
Ship Building	2	60,000	50	10,000	50	10,000					75		10
Saw Mills	10	392,100	442	152,900	442	152,900					1,641		86
Repair Shops	18	6,250	20	6,400	20	6,400							
Tailor Shops	1	450	1	300	1	300							
Tinner	1	300	1	150	1	150							

BRADFORD COUNTY.

Grand Total	147	\$ 154,050	624	\$ 192,420	595	\$ 101,000	29	\$ 1,330				770	485
Naval Stores	18	17,000	271	95,974	271	95,974						349	199
Cooperage	13	870	13	3,910	13	3,910						12	12
Shingle Mills	1	800	3	180	3	180						4	2
Saw Mills	11	21,600	60	26,100	60	26,100						86	40
Broom Factory	1	275	1	200	1	200						1	40
Cigar Factory	1	2,000	2	1,500	2	1,500						2	2
Shoe Repairs	3	1,500	3	1,650	3	1,650						3	8
Blacksmith Shops	19	13,250	26	13,050	26	13,050						27	24
Plow Factory	1	4,000	2	1,000	2	1,000						5	1
Garages	8	11,500	11	6,450	11	6,450						12	10
Grist Mills	20	6,150	34	3,135	34	3,135						33	83
Feed Mills	3	285	3	160	3	160						3	3
Rice Mill	1	100	1	150	1	150						1	1
Bean Hoppers	1	125	1	100	1	100						1	1
Cross Tie Manufacturing	5	8,500	50	8,500	33	7,900	17	600				63	32
Logging	3	8,000	20	9,800	20	11,800						34	20
Cord Wood	4	2,500	17	5,700	17	5,700						24	16
Ice and Cold Storage	2	16,000	7	2,520	7	2,520						9	6
Jewelry and Repairs	1	2,000	1	1,000	1	1,000						1	1
Canning Factories	27	5,015	30	3,210	18	2,480	12	780				30	30
Cotton Gins	9	32,200	59	7,480	59	7,480						70	49

BREVARD COUNTY.

Grand Total	11	\$ 506,310	438	\$ 105,400	428	\$ 83,452	7	\$ 21,337	3	\$ 600	182	352
Cooperage	1	500	1	1,092	1	1,092						
Fisheries	3	17,500	63	42,430	59	40,930	1	900	3	600	78	46
Saw Mills	2	402,600	340	40,805	337	23,920	3	16,845			380	280
Machine Shops	3	17,301	11	9,245	8	5,633	3	3,612			46	7
Naval Stores	1	68,000	21	8,837	21	8,837					25	18
Automobile Repair	1	3,000	2	3,000	2	3,000					3	1

BROWARD COUNTY.

Grand Total	31	\$ 115,875	111	\$ 74,850	100	\$ 72,250	11	\$ 2,600			156	73
Bicycle Repairs	4	5,900	3	1,550	3	1,550					6	3
Blacksmith Shops	6	2,250	4	1,500	4	1,500					10	5
Boat Building	1	3,500	4	4,500	4	4,500					10	2
Cigar Factory	1	100									1	1
Garages	6	32,100	20	22,600	20	22,600					29	15
Machine Shops	1	3,500	1	500	1	500					2	1
Millinery	1	1,250	1	1,250	1	1,250					2	1
Picture Frame Works	1	75									1	1
Saw Mills	5	26,000	53	32,750	53	32,750					63	41
Bottling Works	1	9,000	2	1,600	2	1,600					3	1
Tin Shop	1	200									1	1
Canning Factories	2	23,500	21	4,800	10	2,000	11	2,600			24	1
Novelty Works	1	8,500	2	4,000	2	4,000					4	1

CITRUS COUNTY.

Grand Total	7	\$ 128,500	130	\$ 58,064	110	\$ 52,414	20	\$ 4,050			187	95
Repair Shops	1	1,500	1	600	1	600					1	1
Garages and Repair Shops	2	6,000	5	3,100	5	3,100					8	4
Crate Factory	1	100,000	100	49,240	80	44,590	20	4,050			150	70
Cotton Gin	1	3,500	4	1,000	4	1,000					8	2
Packing House	1	4,000	15	600	15	600					15	15
Ice and Light Plant	1	13,500	5	3,524	5	3,524					5	3

CALHOUN COUNTY.

Grand Total	41	\$ 313,040	803	\$ 320,760	761	\$ 313,010			42	\$ 7,750	984	640
Brick Kilns	1	8,500	10	1,800	10	1,800					12	18
Blacksmith Shop	1	500	1	300	1	300					3	1
Cotton Gins	1	3,500	3	3,000	3	3,000					3	3
Grist Mills	7	3,700	4	1,100	4	1,100					4	4

TABLE NO. 8, (FIRST HALF.)—MANUFACTURES—BY COUNTIES.

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machin- ery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 18 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
ALACHUA COUNTY.												
Grand Total	140	\$ 1,050,000	683	\$ 358,547	613	\$ 343,947	50	\$ 14,600			728	563
Cotton Gins	17	321,000	107	13,970	88	11,770	24	2,200			112	112
Blacksmith Repair Shops	16	12,900	23	14,200	28	14,200					28	28
Ice Manufacturing	5	72,500	21	10,307	21	10,307					19	19
Iron Foundry	2	23,000	31	24,200	31	24,000					39	15
Gas Plant	1	20,000	5	6,000	5	8,000					8	3
Paint and Repair Shop	1	1,000	1	1,200	1	1,200					1	1
Saw Mills	9	83,200	78	69,900	78	69,900					102	38
Garages and Repair Shops	16	53,100	36	34,400	35	33,600	1	800			41	35
Naval Stores	14	276,000	193	86,250	193	86,250					208	131
Tailor and Repair Shops	1	1,000	2	2,500	2	2,500					2	2
Grist Mills	18	10,800	38	3,420	38	3,420					38	28
Tin Shops	3	1,500	4	4,100	4	4,100					4	4
Plumbing and Repair Shops	1	2,000	2	2,000	2	2,000					2	2
Bicycle and Repair Shops	2	3,000	5	3,300	5	3,500					5	6
Millinery Shops	3	6,400	7	5,000			1	5,000			7	7
Bakeries	3	15,000	10	7,500	9	6,700	1	800			10	10
Jewelry Shops	4	11,500	7	8,200	7	8,200					7	9
Shoe Shop and Repairs	6	3,800	9	4,600	9	4,600					4	4
Fertilizer Plant	1	50,000	4	3,000	4	3,000					25	25
Printing Plants	3	27,000	25	15,500	19	12,500	6	3,000			18	18
Laundries	2	15,000	18	6,500	7	3,700	11	2,800			1	1
Gunsmith	1	500	1	1,000	1	1,000					3	3
Furniture Repair Shops	2	4,000	3	2,700	3	2,700					15	10
Cabinet Shop	1	16,000	12	12,000	12	12,000					7	7
Bottling Works	3	12,000	7	6,500	7	6,500					6	6
Vulcanizing and Repairing	3	4,000	6	7,300	6	7,300					3	3
Wagon Manufacturers and Repairs	2	3,000	3	2,800	3	2,800						

BAKER COUNTY.

Grand Total	56	\$ 258,150	433	\$ 181,580	251	\$ 105,380	182	\$ 75,200				
Saw Mills	8	91,000	113	43,100	113	43,100						
Naval Stores	5	113,000	201	99,180	76	36,680	125	62,500				
Cotton Gins	5	17,500	27	9,300	9	5,600	18	4,300				
Cooper Shops	3	1,100	44	2,800	21	1,400	23	1,200				
Corn Mills	13	14,000	13	2,900	5	1,000	8	1,000				
Blacksmith Shops	11	11,250	16	13,600	10	6,600	6	4,300				
Shingle Mills	3	5,000	7	3,000	7	3,000						
Garages	3	3,500	6	5,500	6	5,500						
Tailors	1	100	1	600	1	600						
Millinery Shops	1	200	2	1,000			2	1,000				
Planing Mills	1	1,500	3	500	3	500						

BAY COUNTY.

Grand Total	124	\$ 1,093,850	1,052	\$ 356,075	1,037	\$ 352,725		\$	15	\$ 2,800	3,400	221
Bottling Works	2	25,000	11	5,000	0	4,400			3	800		
Blacksmiths	11	3,500	2	3,325	12	3,325						
Bakeries	2	1,200	4	1,500	4	1,500						
Boat Repairing	7	2,250	12	1,900	12	1,900						
Brick Kiln	1	4,000	3	600	3	600						
Cooperage Shops	19	3,800	20	1,750	20	7,150						
Canneries	1	500	3	450	3	450						
Dry Kilns	2	20,000	20	9,500	20	9,500					31	38
Cross Ties	1	6,000	8	3,600	8	3,600					12	
Electric Plants	2	38,000	12	7,000	18	2,000						
Grist Mills	3	1,500	3	750	3	750						
Feed Mill	1	400	1	200	1	200						
Ice Factories	2	30,000	9	3,400	9	3,400						

Ladder Factories	4	709	4	400	4	400	4	4
Laundries	7	71,025	23	18,300	23	18,300	27	18,300
Millinery	6	4,409	10	2,900	10	2,900	10	2,900
Naval Stores	11	410,000	317	189,500	317	189,500	405	245,000
Pressing Clubs	4	1,025	7	1,300	7	1,300	9	1,300
Plumbing	3	5,300	4	2,200	4	2,200	6	2,200
Planing Mills	5	48,090	54	32,000	54	32,000	84	48,090
Packing Houses	30	341,599	525	184,480	525	184,480	724	384,480
Printing Works	8	18,000	39	26,420	39	26,420	54	26,420
Blacksmith and Repairs	44	60,525	94	24,700	94	24,700	135	24,700
Veneering	2	50,000	100	110,000	100	110,000	124	110,000
Saw Mills	28	117,000	657	601,000	657	601,000	1,811	345,000
Cross Tie	6	2,450	62	20,100	62	20,100	95	20,100
Vulcanizing	13	2,750	13	1,000	13	1,000	18	1,000
Well Drilling	5	1,400	16	11,500	16	11,500	18	11,500
Rice Mills	1	500	1	500	1	500	1	500
Feed Mills	1	250	1	200	1	200	1	200
Syrup Manufacturing	8	500	4	400	4	400	4	400

DUVAL COUNTY.

Grand Total	514	\$ 9,275,075	5,876	\$ 3,978,894	5,262	\$ 3,671,308	614	\$ 302,796	\$	7,204	1,860
Automobile Repairs	36	45,190	131	134,540	131	134,540				160	106
Bicycle Repairs	27	50,773	47	36,500	47	36,400				50	35
Bakeries	11	131,800	142	117,100	135	114,200		2,000		179	117
Bottling Works	4	85,090	50	37,000	40	35,050	1	1,850		63	18
Blacksmiths	18	9,400	20	23,500	20	23,500				29	24
Broom Factories	2	28,000	25	24,500	23	10,500	10	8,000		50	18
Bag Factory	1	30,100	38	9,500	12	4,300	26	6,200		45	30
Clothes Repairers	44	9,500	70	43,900	08	43,100	2	800		78	60
Concrete Works	2	70,000	90	109,500	90	109,500				134	80
Clear Manufacturers	9	253,800	380	282,553	330	251,400	59	31,153		401	338
Candy Manufacturers	2	15,500	24	7,000	12	4,550	12	2,450		24	17
Crackers Manufacturer	1	130,000	60	56,000	25	23,500	35	32,500		90	50
Contractors	1	10,000	20	8,000	20	8,000				20	10
Cotton Oil Products	1	300,000	100	45,000	100	45,060				110	40
Cabinet Makers	7	2,800	13	12,200	13	12,200				21	8
Coffin Manufacturers	1	1,000	2	2,000	2	2,000				4	2
Carriage Manufacturers	7	80,100	73	04,500	73	04,500				80	61
Dressmaking	18	6,600	52	26,600	2	1,400	50	25,200		60	41
Distillation Fine Products	1	150,000	100	80,000	100	90,000				110	90
Dying and Cleaning Works	4	22,700	45	27,500	45	27,500				52	37
Electrical Construction	1	25,000	20	16,500	20	16,500				25	18
Engineering and Construction	1	30,000	85	38,000	85	38,000				100	62
Fertilizer Manufacturers	0	2,650,000	705	289,490	705	289,490				1,115	560
Horse Shoeing	10	2,550	18	13,200	18	13,200				23	16
Harness Manufacturing and Repairing	2	3,000	6	6,000	6	6,000				8	6
Hat Manufacturing	8	24,900	35	17,150	20	11,892	13	5,458		45	27
Ice Manufacturing	5	255,000	210	102,450	210	102,450				233	187
Jewelry Repairing	19	25,250	51	68,100	51	68,100				62	45
Laundries	22	109,100	436	176,823	230	103,050	206	72,875		495	307
Locksmiths	3	3,000	6	5,200	6	5,200				8	6
Millinery	11	33,400	81	42,600	1	500	60	42,100		78	43
Machine Shops	10	808,700	206	321,100	294	319,100	2	2,000		342	250
Mattress Manufacturing	1	1,000	5	3,000	2	1,800	3	1,400		6	4
Machine Repair Shops	6	2,300	14	12,320	14	12,320				17	12
Metal Products	1	150,000	60	20,500	60	26,500				70	40
Manumant Manufacturers	3	31,000	23	20,750	23	20,750				29	13
Musical Repair Shops	1	1,000	1	1,000	1	1,000				1	1
Mirror Plating	1	1,000	1	1,800	1	1,800				1	1
Novelty Works	1	2,000	1	1,000	1	1,000				1	1
Picture Frame Manufacturers	2	12,000	8	6,800	8	6,800				10	7
Papering and Painting	3	25,500	34	37,000	34	37,000				52	30
Photographers	11	14,300	21	18,500	21	18,500				23	17
Newspaper Publishers	3	500,000	210	220,000	203	209,000	13	13,000		223	171
Plumbers	9	54,500	69	08,540	69	08,540				99	57
Printers	24	239,700	176	158,900	123	128,400	43	28,500		268	135
Ostrich Plumes and Farns	1	5,000	5	4,000	4	3,200	1	800		6	4
Painters	0	3,000	12	13,300	12	12,300				00	11
Plumers	5	20,100	21	24,000	21	24,000				30	17
Tailors	10	24,000	55	43,800	52	42,800	3	1,000		72	41
Naval Stores	6	140,000	145	51,000	145	51,000				170	113
Tent and Awning Manufacturers	3	2,500	12	12,000	9	9,500	3	2,500		8	3
Trunk Manufacturing	1	1,000	1	1,200	1	1,200				1	1
Roofing Company	1	10,000	4	6,800	4	6,000				12	7
Saw Mills	7	2,550,800	1,007	576,826	857	552,826	50	24,000		1,304	741
Ship Builders	4	75,000	57	42,000	57	42,000				65	42
Syrup Manufacturers	2	14,000	18	10,000	18	10,000				22	12
Shoe Repairing	55	25,700	99	74,750	98	74,750				168	99
Show Case Manufacturing	1	25,000	09	8,000	10	8,000				15	0
Hed Spring Manufacturing	1	25,000	30	32,000	30	32,000				40	20
Umbrella Manufacturers	1	1,500	5	3,400	3	2,500	2	900		5	3
Well Drillers	1	10,000	6	0,000	6	6,000				10	7
Typographers	6	4,200	10	12,200	10	12,200				15	7
Planting Mills	5	128,000	124	85,000	114	71,000	10	13,500		153	92
Shingle Mill	1	10,000	45	24,500	45	24,500				55	30
Pressing, Repairing and Cleaning	12	22,700	45	27,500	45	27,500				52	33
Sign Painters	6	3,000	12	13,300	12	13,300				16	8

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued.)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machinery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
Ice Factories	1	20,000	2	1,500	2	1,500					3	2
Repair Shops	3	350	3	1,200		1,200					4	3
Saw Mills	10	2,267,950	374	177,980	337	171,230					434	292
Naval Stores	17	414,140	406	141,930	401	140,030			37	6,750	522	317
									5	1,000		
COLUMBIA COUNTY.												
Grand Total	234	\$ 32,794	348	\$ 52,902	167	\$ 22,602	181	\$ 20,300		\$	531	163
Blacksmith Shops	5	320	9	2,220	9	2,200					9	6
Shoe Shops	4	1,050	4	2,300	4	2,300					4	4
Naval Stores	5	40,000	32	13,575	32	13,575					134	33
Cotton Gins	5	11,000	28	2,810	28	2,810					29	18
Saw Mills	4	4,300	25	6,022	25	6,022					41	8
Grist Mills	2	900	4	725	4	725					2	1
Wood Mills	1	350	1	150	1	150					1	1
Machine Shop	1	8,000	10	5,000	10	5,000					16	6
Miscellaneous	12	2,410	4	800	4	800					5	2
Canning Manufacturing	205	1,864	181	20,300			181	20,300			190	85
DADE COUNTY.												
Grand Total	28	\$ 2,996,918	839	\$ 709,469	817	\$ 699,813	22	\$ 9,656		\$	987	580
Light and Power Company	1	525,685	71	49,408	70	49,406	1	1,600			71	71
Electrical Repairs	3	32,800	28	23,980	24	20,184	4	3,796			28	18
Machine Shops	4	132,800	38	31,267	35	30,768	1	500			48	28
Quarry	1	211,442	100	132,222	85	130,083	15	2,160			100	70
Stone Works	1	3,000	5	4,600	5	4,600					3	3
Dredging	1	500,000	300	220,000	300	220,000					475	250
Irrigation Installation	1	30,000	7	6,500	7	6,500					10	4
Gas Manufacturing	1	700,000	71	51,006	70	49,406	1	1,600			71	71
Fisheries	1	234,415	60	32,038	60	32,038						
Building Contractor	1	11,000	5	4,000	5	4,000					20	2
Blacksmiths	2	40,000	18	22,360	18	22,360					12	6
Road Building	1	20,000	40	62,400	40	62,400					75	20
Foundry and Machine Works	2	32,700	12	16,645	12	16,645					16	9
Cigar Manufacturing	1	2,700	4	3,000	4	3,000					6	1
Painters and Trimmers	1	10,000	15	5,000	15	5,000					20	10
Motorcycle Repair	1	7,500	4	2,800	4	2,800					4	0
Vulcanizing	1	1,000	2	1,950	2	1,950					3	2
Water Works Company	1	498,078	48	30,997	48	30,997					10	5
Garages	3	5,800	13	9,300	13	9,300					15	10
DE SOTO COUNTY.												
Grand Total	381	\$ 2,098,225	2,401	\$ 1,565,875	2,491	\$ 1,565,875		\$		\$	5,183	1,904
Asphalt Plants	1	7,000	8	6,000	8	6,000					10	5
Boat Building	3	5,700	19	5,100	19	5,100					43	17
Bakeries	3	3,000	4	4,000	4	4,000					7	4
Bicycle Repairs	2	1,100	2	1,400	2	1,400					4	2
Bottling Works	3	8,000	10	5,000	10	5,000					16	7
Cooperage	6	3,000	2	8,000	9	8,000					9	0
Cigar Factories	3	900	8	4,200	8	4,200					8	5
Canning Factories	2	20,000	20	20,000	20	20,000					40	10
Electric Plants	17	100,600	80	26,460	88	26,460					130	64
Fisheries	5	162,000	123	12,500	123	12,500					230	48
Garages	29	185,000	70	59,185	70	59,185					98	50
Grist Mills	9	1,000	10	1,600	10	1,600					10	10
Cotton Gins	2	5,000	3	5,000	6	5,000					12	1
Irrigation Plants	98	38,140	161	21,530	161	21,530					213	128
Ice Plants	5	68,000	20	20,000	20	20,000					28	16
Jewelry Repairs	3	10,300	4	3,500	4	3,500					4	4

Naval Stores	12	542,500	282	84,600	282	84,600					387	282
Shingle and Lumber Mills	4	725,000	475	24,750	475	24,750					675	450
Planing Mill	1	10,000	10	3,000	10	3,000					10	4

GADSDEN COUNTY.

Grand Total	30	530,850	492	224,108	455	77,308	18	2,800			1,857	311
Garages	3	5,500	11	7,000	11	7,000					17	7
Saw Mills	10	15,900	51	14,350	51	14,350					61	17
Fullers Earth Companies	2	375,000	300	160,000	300	160,000					1,620	200
Grist Mills	15	1,200	19	5,820	19	5,820					21	11
Ice Factory	1	20,800	10	5,038	10	5,038					10	5
Blacksmiths	5	5,450	8	3,100	8	3,100					8	5
Naval Stores	2	25,000	50	14,800	41	12,000	18	2,800			65	42
Brick Yards	2	80,000	35	14,000	35	14,000					55	24

HAMILTON COUNTY.

Grand Total	68	180,500	453	120,200	457	114,600				18	5,600	505	836
Naval Stores	13	71,000	218	43,300	218	43,300						243	142
Cotton Gins	8	14,220	45	3,800	45	3,800						43	81
Repair Shops	15	0,000	25	0,050	25	0,050						21	19
Grist Mills	13	4,050	20	4,050	20	4,050						20	20
Millinery	6	5,150	6	2,650	6	2,650						6	6
Electric Plants	1	6,000	2	3,000	2	3,000						2	2
Bottling Works	2	1,450	6	3,000	6	3,000						6	6
Shingle Mills	2	1,800	8	3,300	8	3,300						9	7
Saw Mills	8	68,500	123	48,050	107	42,450				10	5,600	156	103

HERNANDO COUNTY.

Grand Total	14	686,100	484	321,598	484	321,598						695	891
Saw Mills	4	546,200	403	239,000	403	239,000						490	323
Naval Stores	3	93,000	60	36,600	60	36,600						95	48
Electric Light and Ice Manufacturing	1	30,000	5	30,998	5	30,998						5	5
Garage	1	5,000	5	5,000	5	5,000						5	5
Feed and Grist Mill	1	5,000	3	3,000	3	3,000						3	3
Blacksmiths	2	1,000	4	3,000	4	3,000						3	3
Repair Shops	2	3,000	4	4,000	4	4,000						4	4

HILLSBOROUGH COUNTY.

Grand Total	1,082	\$14,036,965	21,243	\$15,143,478	16,522	\$12,302,364	4,600	\$ 2,825,858	61	\$ 15,450	21,243	21,243
Bakeries	27	95,350	167	112,504	148	105,432	6	3,900	15	3,172	167	167
Bicycles and Motorcycles	16	10,350	27	20,936	27	20,936					27	27
Blacksmiths	30	21,450	59	51,524	59	51,524					59	59
Bottling Works	7	127,000	45	32,088	35	27,564	4	2,984	6	1,560	45	45
Box Factories	3	350,000	581	425,084	202	270,504	269	155,480			581	581
Candy Manufacturers	10	12,600	50	20,952	27	15,756	23	14,196			50	50
Cement Contractors	10	38,150	122	96,814	122	96,814					122	122
Clear Factories	149	5,568,425	12,318	9,890,830	8,543	7,602,134	3,750	2,284,900	16	3,796	12,318	12,318
Coal Burners	25	4,375	38	21,944	38	21,944					38	38
Coffee Grinders—Coffee and Tea Blenders	31	103,050	75	60,456	73	65,468	1	780	1	208	75	75
Cross Tie Manufacturers	11	9,700	76	45,858	76	45,858					76	76
Dressmakers	92	8,390	119	67,382	1	780	118	60,602			119	119
Electricians	6	22,500	38	42,796	38	42,796					38	38
Furniture Repairs	20	2,330	26	17,160	26	17,160					26	26
Garage Repairs	62	87,200	267	277,204	267	277,204					267	267
General Contractors	36	282,500	788	721,590	782	716,494	6	5,096			788	788
Grist Mills	7	9,550	13	8,042	13	8,042					13	13
Harness Makers	3	1,400	4	4,160	4	4,160					4	4
Ice Cream Manufacturers	37	24,370	69	41,112	66	38,720	3	2,392			69	69
Ice Factories	10	472,500	186	146,484	180	146,484					186	186
Jewelers and Watch Repairs	20	34,200	43	53,092	42	52,260	1	832			43	43
Job Printers and Book Binders	22	133,900	121	106,184	92	82,310	29	23,868			121	121
Laundries	28	135,625	306	201,470	144	128,176	162	73,294			306	306
Macaroni Factories	4	14,600	20	16,588	20	16,588					20	20
Machine and Iron Works	13	197,500	146	169,832	145	168,584	1	1,248			146	146
Markets—Manufacturing Department	81	10,055	89	44,328	88	43,704					89	89
Milliners	13	34,425	45	36,680			45	36,680			45	45
Miscellaneous Manufacturers	56	5,595,050	1,340	1,001,084	1,168	902,350	150	98,214	2	520	1,340	1,340
Naval Stores	4	23,000	75	47,320	75	47,320					75	75
Novelty Works	4	39,000	15	13,780	15	13,780					15	15
Opticians	4	20,800	9	9,360	8	8,320	1	1,040			9	9
Photo Print Works	18	7,870	32	31,252	24	23,660	8	7,592			32	32
Plumbers	17	51,100	65	78,780	65	78,780					65	65
Rubber Tire Works	6	18,800	36	31,720	33	29,224	3	2,496			36	36
Saw Mills	26	307,000	434	344,188	425	337,272	9	6,916			434	434
Ship Building and Marine Ways	10	2,011,500	3,011	576,180	2,091	549,120	20	21,060			3,011	3,011
Shoe Makers and Repairers	51	14,015	82	53,162	74	51,072					82	82
Tailoring, Cleaning and Repairing	75	22,445	160	12,676	143	112,226	17	12,168	9	3,288	160	160
Water Works	5	1,027,000	44	38,440	42	37,572	2	1,872			44	44
Wood Yards	23	28,725	83	46,248	87	44,272	2	1,144	4	832	93	93

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machin- ery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
ESCAMBIA COUNTY.												
Grand Total	103	\$ 4,849,353	5,027	\$ 4,067,841	4,666	\$ 1,420,715	341	\$ 123,155	20	\$ 3,552	6,053	780
Shoe Repairing	13	13,050	30	17,448	16	10,468	5	1,068	9	1,612	34	17
Tailors and Repairing	12	10,850	35	15,850	11	909	18	3,990	6	510	8	2
Bottling Works	3	87,500	20	26,344	21	16,344	8	800			8	2
Grist Mills	2	1,800	2	948	2	948					1	1
Manufacturers and Repairers Turpentine Stills	1	4,000	3	3,200	3	3,200					2	2
Candy Manufacturers	2	4,000	6	7,500	2	3,800	4	1,200			4	1
Millinery	1	3,500	4	3,000	4	3,000					3	1
Shipbuilding and Repairing	7	2,346,500	3,790	3,207,000	3,592	654,545	197	77,455	1	280	4,470	66
Box Factory	1	1,500	4	1,500		1,500					6	2
Manufacturers Lens and Repairing	1	1,000	4	2,200	2	1,200	2	1,200			2	2
General Repair Shops	13	38,300	35	32,374	26	21,974	9	10,400			15	4
Bakeries	4	20,900	34	19,086	29	20,301	5	1,786			62	27
Laundries	6	53,200	91	44,800	36	30,100	60	14,700	1	150	121	57
Saw Mills	1	1,569,153	463	309,101	458	298,201	2	900	3	1,000	523	260
Fertilizer Manufacturers	1	30,000	10	7,500	10	7,500					12	8
Manufacturers of Gas	1	400,000	30	25,000	28	23,000	2	2,000			50	25
Manufacturers Doors, Sash and Blinds	1	10,000	30	20,800	30	20,800					48	30
Cabinet Shop	1	500	5	2,500	5	2,500					8	3
Plumbing and Electrical Works	3	11,000	34	38,700	31	27,050	3	1,650			19	3
Manufacturer Butter and Milk Sterilizing	1	3,000	7	7,500	3	6,700	2	800			9	6
Harness Maker and Repairer	1	2,500	1	1,000	1	1,000					1	1
Cooper Shops	2	70,000	165	159,600	159	157,800	6	1,800			255	90
Marble Works	1	1,500	4	2,100	4	2,100					4	4
Printing Shops	5	40,000	32	20,700	20	21,000	12	5,100			25	16
Machine Shops	5	33,000	114	40,795	108	28,689	6	1,806			268	99
Planing Mill	1	50,000	20	12,000	20	12,000					30	17
Auto Repairing	13	45,900	45	43,135	45	43,135					59	34
FLAGLER COUNTY.												
Grand Total	15	\$ 112,000	446	\$ 284,100	446	\$ 284,100					450	406
Blacksmith Shop	1	2,500	1	1,500	1	1,500					1	1
Saw Mills	4	56,500	251	133,000	251	133,000					255	247
Naval Stores	7	43,000	186	146,500	186	146,500					186	150
Bottling Works	1	1,000	2	1,200	2	1,200					2	2
Barrel Factory	1	2,000	4	1,200	4	1,200					4	4
Light and Ice Plant	1	5,000	2	700	2	700					2	2
FRANKLIN COUNTY.												
Grand Total	57	\$ 1,865,000	1,832	\$ 278,850	1,532	\$ 274,370	100	\$ 4,500			2,128	1,016
Fisheries and Packing Establishments	16	254,900	624	67,200	624	67,200	100	4,500			748	78
Blacksmith and Repair Shops	5	6,400	13	9,900	13	9,900					17	9
Ways	3	38,000	36	9,000	36	9,000					47	9
Bottling Works	1	10,000	10	3,000	10	3,000					10	10
Gasoline and Oil Supply Shops	2	29,000	10	30,000	10	30,000					10	10
Plumber and Repair Shops	2	2,300	6	1,800	6	1,800					7	4
Auto Repair Shop	1	10,000	4	1,200	4	1,200					4	4
Bakeries	2	1,800	4	1,200	4	1,200					4	3
Cabinet Shop	1	5,000	4	1,200	4	1,200					4	4
Machine Shop	1	5,000	10	3,000	10	3,000					15	4
Ice Manufacturing	2	54,000	23	6,900	23	6,900					28	18
Ship Yard	1	70,000	25	7,500	25	7,500					35	25
Laundry	1	1,000	2	600	2	600					2	2
Saw Mills	1	100,000	100	30,000	100	30,000					125	100

LAKE COUNTY.

Grand Total	50	\$ 559,163	486	\$ 202,531	395	\$ 197,511	88	\$ 4,150	3	\$ 870	527	285
Millinery	1	500	3	600	2	1,200	3	600			3	5
Laundry and Repairs	1	1,000	10	3,500	2	1,200	8	2,300			10	10
Auto Repairs	10	12,500	24	15,000	24	15,000					24	15
Watch Repairs	1	500	2	1,000	1	500	1	550			2	1
Shoe Repairing	1	500	2	600	2	800					2	1
Packing Houses (fruit)	10	134,000	144		70		74				144	62
Bakery Products	3	5,500	9	1,200	0	1,200					9	6
Novelty Works	1	2,000	3	1,600	3	1,600					3	2
Manufacturer Soft Drinks	1	7,000	6	3,370	3	2,500			3	870	7	4
Manufacturer Soft Drinks	5	159,487	20	23,464	20	23,464					20	24
Water, Light and Ice	1	2,000	2	700	2	700					2	1
Pumbing and Repairs	5	33,176	17	14,047	15	13,347	2	700			21	12
Publishing and Printing	2	30,000	20	8,500	20	8,500					25	17
Brick Manufacturers	2	20,000	40	12,000	40	12,000					40	28
Naval Stores	3	101,000	115	58,000	115	58,000					115	60
Saw Mills and Shingles	2	50,000	60	81,000	60	80,000					60	45
Knoll Mining												

LEE COUNTY.

Grand Total	28	\$ 490,700	148	\$ 73,858	137	\$ 71,783	8	\$ 2,000	31	\$ 75	224	93
Marine Ways and Machine Shops	3	34,000	22	11,440	22	11,440					35	14
Storage Battery Plant	1	1,000	1	10		10					1	1
Cigar Manufacturing	2	1,700	0	600	0	600					9	4
Blacksmith Repair Shops	3	6,500	5	520	5	520					8	4
Electric Shoe Shop	1	1,500	2	600	2	600					3	1
Shoe, Harness and Saddlery Manufacturer	1	500	1	300	1	300						
Bicycle Shops	2	1,500	3	340	3	340					3	3
Saw Mill	1	2,000	5	900	5	900					10	3
Tailor Shop	1	1,500	2	400	2	400					3	1
Candy and Cream Manufacturer	1	500	2	300	2	300					2	2
Lumber and Novelty Works	1	20,000	6	600	6	600					10	5
Garages	1	70,000	18	11,448	18	11,448					27	14
Ice and Electric Plants	4	287,000	36	27,500	33	26,750	3	75			51	30
Wagon Works	1	3,000	2	800	2	800					2	2
Fibre Company	1	35,000	2	900	2	900					10	7
Clam Packers	1	25,000	30	17,000	22	15,000	8	2,000			50	2

LEON COUNTY.

Grand Total	160	\$ 805,565	1,693	\$ 401,046	1,216	\$ 301,394	131	\$ 6,503	470	\$ 2,977	1,039	588
Auto Repair Shops	8	18,400	15	10,800	15	10,800					20	9
Basket Factories	5	60	5	43	5	43					5	5
Blacksmith Repair Shops	17	1,735	18	1,985	17	1,945	1	40			21	15
Bakeries	2	3,000	4	1,800	4	1,800					5	2
Broom Factory	1	500	1	300	1	300					1	1
Bee Keepers Supplies	1	500	1	200	1	200					1	1
Chero-Cola Plant	1	0,000	3	2,600	3	2,600					5	2
Candy Factories	1	725	4	850	3	625	1	225			7	2
Collar Factories	2	45	1	35	1	25	1	10			3	2
Colton Gins	9	11,350	25	1,550	25	1,550					26	20
Cane Mills	40	10,880	813	4,158	387	2,681	80	358	341	1,137	38	19
Cross Ties	3	4,000	28	22,100	28	22,100					38	19
Cigar Manufacturers	2	4,500	5	3,000	5	3,000					18	9
Cooper Shops	2	425	2	360	2	360					2	2
Foundry	1	20,000	10	0,000	10	0,000					15	0
Grist Mills	23	0,320	30	4,220	30	4,220					36	25
Ice Plant	1	40,000	25	15,000	25	15,000					30	20
Laundries	2	7,000	9	3,200	6	2,600	3	600			14	2
Lumber Companies	2	105,000	165	169,200	165	169,200					195	135
Monument Company	1	500	1	300	1	300					1	1
Mattress Making	1	125	1	100	1	100					1	1
Metal Works	1	1,500	2	2,000	2	2,000					2	2
Naval Stores	11	201,000	214	80,410	214	80,410					284	153
Oil Mill	1	75,000	40	15,000	40	15,000					50	30
Pressing Clubs	2	2,200	4	1,180	4	1,180					6	3
Tobacco Packer	1	0,500	60	6,400	30	3,800	25	1,500	25	1,100		
Paint Shop	1	500	1	500	1	500					1	1
Photographers	2	1,250	3	900	2	700	1	200			3	3
Printing Shops	2	63,000	30	25,500	23	23,500	6	1,800	1	200	50	19
Planing Mills	1	34,000	35	13,800	35	13,800					55	23
Saw Mills	7	17,000	89	45,300	89	45,300					119	54
Shoe Repairing	2	2,500	4	1,800	4	1,800					4	4
Upholstering	1	50	1	100	1	100					1	1
Wagon Factories	2	3,050	5	1,575	5	1,575					6	3
Wood Yards	4	1,350	11	1,380	11	1,380					13	8
Water, Gas and Electricity	1	230,000	20	12,000	20	12,000						

LIBERTY COUNTY.

Grand Total	24	\$ 302,092	608	\$ 368,497	595	\$ 357,797		\$	103	\$ 10,700	748	484
Blacksmith and Repair Shops	6	2,750	4	2,812	4	2,812					6	2
Naval Stores	11	282,097	451	159,080	375	149,360			78	9,700	450	302
Saw Mills	5	14,145	243	206,625	210	205,625			27	1,000	283	180
Grist Mills	2	2,500										

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued.)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (Including Lands, Buildings, Improvements, Machi- nery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
HOLMES COUNTY.												
Grand Total	21	\$ 549,769	430	\$ 125,530	430	\$ 125,530					531	374
Auto Repair Shops	2	5,500	4	2,100	4	2,100					8	4
Blacksmith Shops	5	2,100	7	3,150	7	3,150					13	5
Grist Mills	7	18,000	10	3,976	18	3,976					26	14
Naval Stores	4	18,800	37	10,500	37	10,500					53	13
Saw Mills	3	510,208	372	105,803	372	105,803					420	338
JACKSON COUNTY.												
Grand Total	48	\$ 463,850	230	\$ 88,915	230	\$ 79,015	14	\$ 9,300			281	130
Grist Mills	10	149,000	13	5,365	13	5,365						2
Rice Mills	2	400	2	120	2	120					2	1
Cooper Shop	1	150	1	150	1	150					5	1
Repair Shops	3	800	3	750	3	750					6	3
Feed Crushers	3	2,850	9	1,000	9	1,000					9	9
Shingle Mills	3	1,325	8	1,700	8	1,700					10	5
Naval Stores	11	259,500	160	40,800	146	40,500	14	9,300			190	81
Saw Mills	6	15,000	27	15,800	27	15,800					33	16
Cotton Gins	4	34,000	21	6,080	21	1,280					21	14
Blacksmith Shops	5	825	6	1,750	6	1,750					5	5
JEFFERSON COUNTY.												
Grand Total	316	\$ 326,590	986	\$ 115,997	666	\$ 98,793	8	\$	320	\$ 17,204	911	1,097
Blacksmith Shops	16	20,500	24	11,700	26	9,100			4	2,600	24	24
Cotton Gins	3	29,000	13	2,400	12	2,300			1	100	13	13
Ice Factory	1	12,000	4	2,500	4	2,500					4	4
Planing Mills	2	11,000	11	3,500	11	3,500					10	10
Syrup Works	247	18,800	532	2,797	322	2,043			210	754	532	532
Saw Mills	20	121,600	214	50,100	173	47,500			41	2,600	184	262
Shingle Mills	4	16,300	35	9,900	29	6,000			0	3,000	23	61
Turpentine Stills	1	83,000	122	29,800	77	22,500			45	7,300	90	170
Grist Mills	10	14,500	31	3,300	18	2,450			12	850	31	31
LAFAYETTE COUNTY.												
Grand Total	48	\$ 1,108,825	1,170	\$ 827,147	1,179	\$ 827,147		\$		\$	1,350	1,018
Automobile Repair Shops	3	9,000	8	4,704	8	4,704					8	8
Blacksmith Shops	8	2,025	10	6,474	10	6,474					10	10
Cooper Shops	6	700	6	1,300	6	1,300					6	6
Chair Shop	1	450	2	1,200	2	1,200					2	2
Cotton Gins	4	14,000	18	1,404	18	1,404					18	18
Grist Mills	6	5,150	16	820	16	820					19	16
Naval Stores	7	578,000	255	138,545	255	138,545					293	210
Planing Mill	1	10,000	50	62,400	50	62,400					55	40
Rice Mill	1	460	2	100	2	100					2	2
Shingle Mill	1	1,000	6	3,800	6	3,800					6	5
Saw Mills	9	483,400	801	602,200	801	602,200					924	696
Wagon and Harness Repairs	1	3,800	5	4,200	5	4,200					5	5

Mattress Manufacturing Company	1	200	1	600	1	600	1	1	1
Vulcanizing and Repairing	3	4,250	5	5,520	5	5,520	5	5	5
Millinery Shops	3	1,200	5	4,400	7	4,400	7	7	5
Vegetable Canning Factory	1	8,000	100	4,000	15	1,000	85	3,000	100
Gunsmith Shop	1	1,000	1	900	1	900	1	1	1
Fish Packing House	1	2,000	10	9,000	10	9,000	10	10	8

MONROE COUNTY.

Grand Total	10	\$ 1,024,012	1,361	\$ 909,414	1,094	\$ 911,837	245	\$ 74,956	10	\$ 2,052	1,793	1,042
Cigar Manufacturers	6	722,012	1,189	806,475	999	785,733	184	52,636	4	912	1,499	903
Cigar Box Factory	1	49,000	115	49,875	40	3,600	80	1,800	15	900	250	165
Ice Factory	1	211,000	40	32,814	38	32,054	1	520	1	240	46	34
Canning Factory (Turtle Soup)	1	30,000	5	4,800	5	4,800						
Iron Foundry	1	12,000	12	15,850	12	15,650						

NASSAU COUNTY.

Grand Total	35	\$ 136,950	172	\$ 83,050	182	\$ 83,050					234	141
Auto Repairs	2	1,000	4	4,200	4	4,200					4	3
Brick and Tile Manufacturer	1	15,000	10	4,000	10	4,000					14	10
Bottling Works	1	1,000	2	1,500	2	1,500					2	2
Blacksmith Shop	2	400	2	900	2	900					3	2
Canning Company	1	10,000	10	4,000	10	4,000					14	10
Grist Mills	5	1,050	4	1,650	4	1,650					4	4
Saw Mills	14	80,500	106	49,200	106	49,200					134	82
Naval Stores	9	28,000	44	17,600	44	17,600					56	34

OKALOOSA COUNTY.

Grand Total	24	\$ 134,610	164	\$ 52,919	184	\$ 52,919					228	115
Naval Stores	3	130,000	80	25,018	80	25,018					100	60
Grist Mills	8	250	9	1,565	9	1,505					9	9
Saw Mills	10	3,050	88	25,880	88	25,880					111	40
Cotton Gins	2	750	6	156	6	156					6	5
Blacksmith Shop	1	600	1	300	1	300					2	1

ORANGE COUNTY.

Grand Total	79	\$ 1,880,559	1,016	\$ 540,871	910	\$ 514,608	96	\$ 24,813	4	\$ 1,450	1,333	620
Auto Palating	1	300	2	1,820	2	1,820					2	1
Bakeries	3	41,000	22	14,900	19	13,200	3	1,500			30	16
Blacksmith Shops	4	2,500	6	3,784	6	3,784					6	6
Broom Factory	1	400	2	780	2	780					4	2
Carriage and Wagon Manufacturers	2	16,500	12	12,075	12	12,075					17	8
Candy Factory	1	5,500	4	2,000	4	2,000					6	4
Canning Factory	1	9,344	4	3,960	4	3,960					5	1
Cigar Manufacturers	3	28,807	45	56,803	45	56,803					59	34
Electricity, Ice, Gas and Water Plants	6	740,500	100	57,588	100	57,588					113	33
Foundry and Metal Works	3	100,400	54	36,260	54	36,260					75	36
Fertilizer Company	1	43,000	6	3,200	6	3,200					10	2
Garage and Repair Shops	8	34,000	48	41,300	48	41,300					67	32
Grist Mill	1	300	1	400	1	400					1	1
Harness Shop	1	1,200	1	600	1	600					1	1
Insecticide Companies	2	12,000	5	3,900	4	3,000	1	900			7	4
Laundries	2	58,000	45	17,000	14	8,600	31	8,400			55	25
Marble and Cement Works	2	800	2	1,450	2	1,450					3	2
Orange Packing Houses	9	59,679	370	102,070	310	98,412	60	13,638			475	195
Orange Picking Bays	1	2,000	1	600	1	600					1	1
Bicycle and Repairing	1	2,500	2	1,720	2	1,720					3	2
Printing Shops	3	32,500	24	25,229	23	26,854	1	375			31	21
Plumbing and Repairing	2	10,000	13	14,000	13	14,000					27	9
Photographer	1	2,500	1	750	1	750					1	1
Saw Mills	4	93,500	109	68,182	109	68,182					159	72
Shoe Repairing	3	5,250	4	4,800	4	4,800					5	4
Sprayers and Repair Work	1	20,000	4	4,940	4	4,940					8	4
Bottling Works	3	22,500	9	6,180	6	5,130			3	1,050	10	7
Tanners and Pressing	3	15,350	10	4,700	9	4,200			1	400	12	7
Naval Stores	5	440,723	105	44,500	105	44,500					124	86
Vulcanizing and Repairs	1	2,500	2	1,800	2	1,800					3	2
Wood Supply Company	1	2,000	3	7,800	3	7,800					6	1

OKEECHOBEE COUNTY.

Grand Total	18	\$ 213,440	264	\$ 288,960	264	\$ 288,960					339	167
Naval Stores	1	50,000	30	18,000	30	18,000					35	25
Blacksmith Shop	1	200	1	1,200	1	1,200					2	1
Bottling Works	1	2,500	2	1,000	2	1,000					2	1
Fish Packers	2	39,000	165	115,000	165	115,000					205	80
Fruit Packing House	1	12,000	20	1,800	20	1,800					20	20
Ice and Electric Light House	1	53,140	8	6,760	8	6,760					8	6
Saw Mills	3	11,000	30	125,600	30	145,000					47	19
Roat Building and Repairing	2	45,000	7	8,460	7	8,460					18	4
Wagon Works and Repairs	1	400	1	1,200	1	1,200					1	1

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued.)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machin- ery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
MADISON COUNTY.												
Grand Total	53	\$ 71,705	328	\$ 104,862	328	\$ 104,862					441	261
Shoe Shops	4	175	1	100	1	100						
Shingle Mills	4	3,500	23	14,700	23	14,700						
Saw Mills	14	41,800	180	70,400	180	70,400					52	24
Naval Stores	5	14,000	93	16,800	93	16,800					250	137
Grist Mills	14	11,375	23	1,961	23	1,961					101	72
Blacksmith Shops	6	770	3	351	3	351					31	21
Cooper Shops	6	85	5	550	5	550					2	2
											5	5
MANATEE COUNTY.												
Grand Total	48	\$ 345,450	353	\$ 226,980	350	\$ 226,480	3	500			504	246
Auto Repair Shops	2	13,000	8	9,100	8	9,100					11	4
Blacksmith and Repairs	16	19,500	23	23,680	23	23,680					53	18
Planing Mill	1	2,000	4	2,400	4	2,400					6	3
Light and Power Plants	2	145,000	17	19,000	17	19,000					25	15
Saw Mills	8	29,050	74	46,600	74	46,600					134	46
Naval Stores	6	90,000	190	106,000	190	106,000					300	140
Rice Mill	1	300	2	1,200	2	1,200					3	1
Irrigation Plant	1	26,000	11	7,000	11	7,000					15	8
Concrete Manufacturer	1	1,000	2	1,500	2	1,500					4	1
Sheet Metal Shops and Plumbing	3	3,100	7	5,500	7	5,500					25	4
Electrical and Rubber Works	1	600	2	600	2	600					4	1
Grapefruit Juice Manufacturer	1	10,000	1	1,500	1	1,500					2	1
Manufacturer Palmello Brushes	1	3,000	9	2,000	6	1,500	3	500			7	2
Ship Building	1	2,000	1	600	1	600					2	1
Canning Factory	1	1,000	2	300	2	300					2	1
MARION COUNTY.												
Grand Total	137	\$ 1,188,150	1,652	\$ 607,997	1,838	\$ 573,580	264	\$ 34,410			1,717	1,206
Saw Mills	6	108,300	144	66,800	144	66,800					168	101
Naval Stores	9	191,000	274	80,650	274	80,650					285	188
Crates and Basket Factories	3	200,000	205	83,577	180	82,877	45	700			224	131
Grist Mills	11	17,750	22	7,750	21	1,150	1	400			22	14
Cotton Gins	5	39,000	41	11,180	35	9,070	6	2,110			56	24
Bean and Peanut Hullers	3	10,800	9	1,850	9	1,850					9	8
Foundry and Machine Shops	2	110,000	60	56,000	60	56,000					62	48
Blacksmith and Repairs	18	11,150	29	17,660	29	17,660					29	26
Lime Kiln Companies	4	135,000	120	50,100	120	50,100					120	80
Garages, Sale and Repairs	12	57,000	51	43,740	51	43,740					51	36
Ice Plant and Cold Storage	3	75,000	30	15,000	30	15,000					30	26
Gas Plant	1	30,000	12	7,200	12	7,200					14	8
Knitting Mill	1	45,000	70	28,000	8	6,200	62	22,000			70	40
Packing Houses (fruit)	18	69,600	352	50,020	303	48,920	49	2,090			375	290
Peanut Butter Factory	1	1,500	6	1,200	6	1,200					6	4
Plumbing and Electric Shops	2	9,500	10	9,800	9	9,200	1	600			10	10
Cigar Factories	3	8,500	9	4,200	9	4,200						
Printing Shops	4	12,000	8	5,700	8	5,700					8	5
Tailoring and Pressing Shops	6	1,375	9	4,800	9	4,800					7	6
Laundry Companies	2	10,200	22	8,800	7	5,200	15	3,600			22	17
Jewelry and Repairing	4	5,400	6	5,200	6	5,200					7	6
Shoe Shop and Repairing	4	1,625	7	3,400	7	3,400					7	6
Bottling Works	2	6,200	10	7,250	10	7,250					10	8
Barrel Factory	1	15,000	3	3,000	3	3,000					5	4
Sash, Door and Lumber Factory	1	10,000	15	8,000	15	8,000					15	10
Metal Works and Repairing	1	1,000	2	2,000	2	2,000					2	1

PINELLAS COUNTY.

Grand Total	42	\$ 649,350	273	\$ 18,795	260	\$ 12,910	12	\$ 5,650	1	\$ 235	423	172
Garage and Auto Repairing	6	181,350	60	60,100	53	53,500	5	1,600			94	35
Cement Block Manufacturers	2	11,000	31	15,200	31	15,200					51	16
Bicycle Shop and Repairs	2	5,500	3	2,250	2	1,800	1	450			4	3
Blacksmith Shop and Repairs	3	3,750	3	3,000	3	3,000					6	3
Cigar Manufacturers	3	3,500	7	5,900	5	4,800	2	1,100			13	2
Cleaning and Pressing Shops	4	7,000	13	9,300	10	8,225	2	900	1	235	20	7
Fruit Packing House	1	30,000	20	20,000	19	19,200	1	800			45	10
Novelty Mills	5	98,000	55	46,200	54	45,400	1	800			74	29
Ice Manufacturing	3	291,300	50	23,950	50	23,000					33	24
Naval Stores	1	8,000	12	5,000	12	5,000					20	10
Saw Mills	3	28,000	26	22,000	28	22,000					41	22
Shoe Shop and Repairs	7	3,950	11	5,835	11	5,835					22	6

POLK COUNTY.

Grand Total	18	\$ 520,300	520	\$ 282,185	515	\$ 279,355	51	\$ 2,780		\$	608	395
Cigar Manufacturers	2	8,500	6	4,380	5	4,300	1	180			6	6
Bottling Works	2	5,000	4	2,450	4	2,450					4	4
Repair Shop	1	500	1	600	1	600					1	1
Garage and Repair Shops	6	20,700	19	15,380	19	15,380					19	19
Ice Manufacturing	1	36,000	11	7,988	11	7,988					11	6
Grapefruit Juice Manufacturing	1	1,000	15	10,439	15	10,439					8	20
Shingle Manufacturing	1	75,000	20	16,600	20	16,600					20	607
Lumber Manufacturers	3	295,000	432	214,780	428	21,160	4	2,600			532	607
Ice and Lights	1	60,600	12	9,580	12	9,580					12	12

PUTNAM COUNTY.

Grand Total	230	\$ 1,854,800	1,695	\$ 1,068,380	1,949	\$ 1,086,880	46	\$ 28,000		\$	2,420	1,598
Cross Tie Manufacturers	27	10,800	261	95,000	261	95,000					325	197
Cleaning and Pressing	13	1,850	15	8,650	15	8,650					27	3
Bakeries	3	4,200	6	5,500	6	5,500					9	3
Cigar Manufacturers	3	800	4	3,700	4	3,700					7	1
Wood Yards	10	2,500	11	9,000	11	9,000					17	5
Steam Laundries	2	5,500	14	7,800	9	5,100	5	2,700			18	10
Lumber Manufacturers	11	702,000	770	398,500	770	398,500					857	701
Bottling Works	3	14,500	13	9,500	13	9,500					17	9
Photographers	2	5,000	3	4,100	2	2,900	1	1,200			5	1
Novelty Works	1	1,500	4	4,000	4	4,000					6	2
Bicycle Repair Shops	3	1,500	3	3,500	3	3,500					6	3
Locksmiths	3	350	3	900	3	900					6	3
Auto Repair Shops	10	18,100	23	28,900	25	28,900					37	13
Marine Ways	3	15,500	14	10,200	14	10,200					20	18
Shoe Repair Shops	6	2,750	11	9,900	11	9,900					19	6
Auto Shipping Blocks	1	6,000	10	4,000	10	4,000					12	8
Millinery Establishments	8	9,350	12	2,600			12	9,600			20	4
Furniture Repairs	8	800	8	5,600	8	5,600					16	8
Garages	8	4,700	11	7,000	11	7,000					19	3
Dreammaking	26	1,800	27	13,500			27	13,500			52	1
Plumbing and Tin Shops	3	4,700	6	8,200	6	8,200					6	3
Concrete Block Manufacturers	2	1,700	5	3,000	5	3,000					8	2
Blacksmith Shops	10	6,500	19	16,400	19	16,400					30	6
Shingle Mills	2	8,000	14	8,000	14	8,000					16	12
Barrel and Staves Manufacturers	4	18,000	35	13,000	35	13,000					44	26
Packing Houses	6	38,000	222	70,130	222	70,130					261	163
Cypress Tanks	1	40,000	13	10,000	13	10,000					16	10
Buckets and Tub Manufacturing	1	40,000	70	34,000	70	34,000					80	60
Job Printing	4	10,000	6	8,000	6	8,000					10	2
Ice Cream Manufacturers	3	1,000	5	3,600	5	3,800					8	2
Machine Shops	6	27,500	33	43,500	33	43,500					40	26
Naval Stores	7	82,000	190	68,000	190	68,000					225	155
Window, Frames and Screens Manufacturers	2	800	3	2,000	3	2,000					5	1
Sewing Machine Repairs	3	100	3	1,500	3	1,500					5	3
Cabinet Makers	2	400	3	1,400	3	1,400					5	1
Boiler Makers and Repairs	4	53,000	25	21,000	25	21,000					32	18
Harness Shop and Repairs	1	200	1	800	1	600					2	1
Electrical Work	2	3,000	3	4,000	3	4,000					5	1
Grist Mills	4	800	4	1,000	4	1,000					4	4
Dry Docks	1	250,000	56	72,000	57	71,000	1	1,000			66	50
Gas Plant	1	75,000	4	3,000	4	3,000					5	3
Electric Light Plant	1	75,000	8	8,000	8	6,000					28	15
Ice Plant	2	60,000	19	16,000	19	16,000					13	9
Water Works	3	250,000	12	10,000	12	10,000					15	9

SANTA ROSA COUNTY.

Grand Total	54	\$ 1,359,752	1,243	\$ 739,099	1,242	\$ 736,498	1	\$ 600		\$	1,721	744
Saw Mills	10	384,100	620	431,500	620	431,580					832	441
Printing Shops	2	3,600	6	4,100	5	3,500	1	600			7	4
Shoe Repairing Shops	2	900	2	2,000	2	2,000					2	2
Blacksmith Shops	3	375	3	2,900	3	2,900					3	3
Naval Stores	9	458,000	245	72,075	245	72,075					331	159

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued.)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machin- ery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
OSCEOLA COUNTY.												
Grand Total	45	\$ 200,175	144	\$ 133,850	142	\$ 132,350	21	\$ 1,500		\$	152	119
Blacksmith Shops	2	21,039	12	2,000	2	2,000					2	2
Concrete Factories	2	1,000	10	4,500	5	4,500					5	2
Wheelright and Repairs	2	200	2	2,000	2	2,000					2	2
Millinery Shops	50	50	4	1,500	4	1,500					4	2
Cigar Manufacturers	3	75	3	3,600	3	3,600					3	2
Ice Manufacturers	22	30,000	15	15,000	15	15,000					15	8
Electric Plant	12	80,000	12	1,200	12	1,200					9	0
Boat Repairing	4	145	4	4,000	4	4,000					4	4
Saw Mills	4	53,250	52	56,500	52	56,500					52	52
Repair Shops	20	38,525	34	26,650	34	26,650					34	22
Painting Shops	11	35,000	11	17,500	9	16,000	2	1,500			22	11
PALM BEACH COUNTY.												
Grand Total	115	\$ 467,070	825	\$ 539,171	792	\$ 496,101	33	\$ 17,800		\$	1,010	686
Cleaners and Pressers	13	5,250	25	10,800	25	19,800					45	24
Blacksmith and Repairers	0	6,400	0	9,950	0	9,950					17	0
Shoemakers and Repairs	0	2,700	0	8,010	0	8,010					13	0
Auto and Bicycle Repairs	25	57,275	61	60,800	56	56,000	5	3,000			29	49
Boat Builders	8	14,200	19	21,100	19	21,100					20	14
Saw Mills	7	10,500	36	26,940	36	26,940					48	30
Fish Packers	10	100,300	458	217,500	454	215,500	4	2,000			555	389
Gas Plant	1	50,000	6	7,200	6	7,200					8	0
Upholstery Plant	1	500	2	1,800	2	1,800					3	2
Ice Cream Manufacturers	2	2,500	4	3,500	4	3,500					5	4
Novelty Works	2	115,000	36	28,900	35	28,000	1	900			40	30
Dressmaking Establishments	3	1,700	17	11,600	10	6,800	7	4,800			14	8
Concrete Works	4	4,000	8	7,200	8	7,200					12	8
Laundries	3	6,225	27	8,750	17	4,070	10	3,800			21	15
Bakeries	4	20,000	26	21,900	22	20,300	4	1,800			25	19
Bottling Works	4	4,000	8	9,200	8	6,000					12	8
Cigar Manufacturers	4	1,800	18	15,500	16	14,700	2	800			21	13
Machine Shops	3	43,620	17	17,641	17	17,641					23	17
Plumbing and Repairs	4	6,200	30	34,200	30	34,200					36	23
Sheet Metal Works	3	5,200	9	9,800	9	9,800					11	9
PASCO COUNTY.												
Grand Total	218	\$ 1,712,870	2,198	\$ 658,010	1,826	\$ 654,510	220	\$ 4,000	47	\$ 3,620	2,411	1,500
Blacksmith Shops	10	10,050	12	7,100	12	7,100					22	12
Cotton Gins	2	14,000	10	9,600	10	9,600					17	10
Irrigation Works	7	114,500	51	25,900	51	25,900					50	30
Cane Mills	113	5,005	350	18,010	348	18,010					468	237
Grist Mills	7	5,600	11	3,100	11	3,100					17	9
Newspapers and Printing	3	10,000	6	3,000	6	3,000					17	9
Packing Houses	2	33,000	93	10,000	93	10,000					9	5
Filling	1	1,000	6	2,000	6	2,000					180	40
Photographers	1	500	1	500	1	500					10	6
Naval Stores	8	373,000	195	78,800	195	78,800					1	1
Tobacco Company	1	100,000	150	70,000	150	70,000					280	108
Saw Mills	11	907,550	834	239,000	614	239,000	80	10,000	30	3,000	200	125
Canning Factory	1	6,000	300	8,500	150	8,000					783	623
Construction Company	1	10,000	2	2,000	2	2,000	140	3,000	10	500	160	100
Concrete Works	1	1,000	2	1,000	2	1,000					2	2
Silos	5	700	50	1,000	30	1,000					30	30
Cigar Factory	1	10,000	60	30,000	60	30,000					100	60
Coal Burners	35	7,000	69	3,700	69	3,700						
General Repair Shops	8	9,375	14	8,300	14	8,300					130	40

ST. LUCIE COUNTY.

Grand Total	25	\$ 139,215	102	\$ 94,528	98	\$ 88,971	6	\$ 5,290	1	\$ 312	141	80
Barrel Factories	2	5,700	4	4,960	4	4,060					4	2
Broom Factorlets	1	1,000	2	3,720	2	3,720					4	2
Cigar Factory	1	300	1	960	1	960					1	1
Concrete Works	2	5,650	6	6,920	6	6,920					29	5
Garages and Machine Shops	7	35,000	27	31,334	23	27,578	4	3,756			34	21
Home Cannery	1	150	5	80	5	80					5	5
Ice Cream Products	1	5,000	4	2,192	3	1,646	1	540			7	4
Ice Factory	1	45,000	12	12,076	12	12,076					12	12
Manufacturer Jellies and Preserves	1	500	1	250	1	250					2	2
Machine Shop	1	7,000	1	540	1	540					2	2
Saw Mills	2	17,000	27	22,725	27	22,725					29	15
Shoe Shops	2	10,015	2	3,170	2	3,170					2	2
Bottling Works	1	3,000	5	2,600	3	1,300	1	088	1	312	5	5
Blacksmith Shop	2	900	3	2,996	4	3,048					4	3

SUWANNEE COUNTY.

Grand Total	23	\$ 38,275	463	\$ 29,450	462	\$ 29,450		\$		\$	135	51
Blacksmith Shops and Repairs	8	2,125	13	3,200	13	3,200					19	9
Cotton Gins	2	2,550	360	1,000	360	1,000					15	8
Naval Stores	2	3,400	31	1,400	31	1,400					37	14
Gin and Grist Mills	4	8,500	16	4,250	16	4,250					20	8
Saw and Grist Mills	4	8,500	17	3,700	17	3,700					17	4
Grist Mills	2	700	5	900	5	900					5	2
Corn Mills	1	11,500	20	15,000	20	1,500					22	8

TAYLOR COUNTY.

Grand Total	38	\$ 1,445,800	1,660	\$ 232,500	1,660	\$ 232,500		\$		\$	1,883	827
Saw Mills	13	1,184,500	927	145,700	927	145,700					965	807
Naval Stores	8	48,000	152	12,700	152	12,700					179	98
Log Camps	3	157,000	520	55,000	520	55,000					650	375
Garages and Repairs	3	18,000	19	5,000	19	5,000					22	12
Electric Plant	1	30,000	11	7,800	11	7,800					13	8
Bottling Works	2	5,000	8	3,000	8	3,000					16	14
Cross Tie Manufacturers	3	1,100	14	1,900	14	1,900					23	10
Milline and Repairing	5	2,200	9	1,400	9	1,400					16	8

VOLUSIA COUNTY.

Grand Total	285	\$ 2,811,740	2,157	\$ 1,205,195	1,940	\$ 1,160,515	185	\$ 43,800	62	\$ 700	2,804	1,187
Saw Mills	11	368,400	902	475,000	898	471,500	4	3,500			1,015	534
Naval Stores	10	422,500	110	73,000	110	73,000					172	52
Cross Ties	17	8,045	247	93,400	247	93,400					345	75
Tire Repairers	4	2,500	6	2,250	6	2,250					6	3
Light, Ice and Power House	6	1,254,000	140	125,880	135	120,680	5	5,200			164	116
Water Power	4	220,000	14	16,280	14	16,280					24	11
Auto Repair Shops	27	63,250	64	65,500	62	63,900	2	1,800			115	40
Auto Painting Shops	5	7,500	7	4,500	7	4,500					11	5
Printing Shops	9	115,700	72	61,380	61	57,800	11	9,500			120	29
Blacksmith Shops	9	7,000	12	7,350	12	7,350					13	9
Shoe Repair Shops	16	9,775	17	3,050	17	3,050					18	16
Novelty Works	7	17,000	29	28,650	29	28,650					53	11
Cleaning and Pressing Shops	24	3,140	31	7,900	22	6,450	9	1,450			43	24
Plumbing and Repairing	12	20,200	24	24,200	24	24,200					37	14
Bakeries	4	8,350	26	14,800	15	10,800	11	4,000			25	13
Watch Repairing	6	4,300	6	4,000	6	4,000					7	6
Laundries	8	16,340	51	7,350	6	3,000	25	4,350			86	16
Bicycle Repair Shops	10	7,400	10	1,325	10	1,325					12	10
Ice Cream Manufacturers	4	3,400	7	4,400	6	3,460	2	1,000			10	5
Sheet Metal Works	5	14,000	21	11,800	21	11,800					32	8
Dressmaking Establishments	15	4,430	43	1,850			18	1,850	25		53	24
Millinery Shops	8	12,600	15	6,050			15	6,050			24	9
Hay Drying	4	22,000	48	49,500	48	40,500					58	29
Bottling Works	4	10,000	17	11,170	15	10,770	2	400			30	7
Manufacturers of Preserves and Jellies	4	15,800	25	6,850	7	3,600	18	3,350			30	12
Boat Building and Repairs	4	33,800	29	19,000	20	19,000					46	12
Paper Hanging	6	4,000	8	2,850	8	2,850					11	7
Cement Contractors	4	14,400	56	35,000	56	35,000					86	24
Grist Mills	3	1,000	3	750	3	750					3	3
Upholstering	9	2,050	4	1,240	2	400	2	850			4	3
Miscellaneous Industries	32	115,860	113	38,750	65	37,250	11	800	87	700	150	60

WAKULLA COUNTY.

Grand Total	24	\$ 208,020	264	\$ 76,121	241	\$ 73,628	1	\$ 72	22	\$ 2,492	355	188
Naval Stores	6	189,750	176	54,248	157	52,256	1	72	18	1,892	222	124
Saw Mills	3	15,000	57	15,950	53	15,450			4	500	74	39
Cooper Shops	4	270	4	200	4	200					6	4
Blacksmith Shops	5	1,650	9	3,840	9	3,840					16	6
Gun Repair Shop	1	100	1	300	1	300					2	1
Grist Mills	4	950	7	783	7	783					10	6
Shingle Mill	1	300	10	800	10	600					15	5

TABLE NO. 3. (FIRST HALF.)—MANUFACTURES—BY COUNTIES.—(Continued.)

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	Number of Establishments.	Capital Invested (including Lands, Buildings, Improvements, Machin- ery, Cash).	Average Number Wage Earners.	Total Amount of Wages of All Employees.	Men 16 Years and Over.		Women 16 Years and Over.		Children Under 16 Years.		Greatest Number Employed at Any One Time During the Year in This Industry.	Least Number Employed at Any One Time During the Year in This Industry.
					Average Number.	Total Amount of Wages Paid These Men.	Average Number.	Total Amount of Wages Paid These Women.	Average Number.	Total Amount of Wages Paid These Children.		
Jewelry and Repairing	2	1,500	2	3,000	2	3,000					2	2
Shipbuilding	4	441,000	295	207,600	295	207,600					485	101
Electricity and Sewerage	1	40,000	4	2,200	4	2,200					6	2
Bottling Works	1	4,000	2	1,500	2	1,500					2	2
Shingle Mills	4	18,500	20	4,300	20	4,300					26	14
Grist Mills	2	600	2	1,600	2	1,600					2	2
Cane Mills	12	1,477	36	1,683	36	1,683					14	6
Cotton Gin	1	1,500	2	1,500	2	1,500					3	1
Feed Mill	1	6,000	4	3,000	4	3,000					6	2

SEMINOLE COUNTY.

Grand Total	11	\$ 287,750	142	\$ 65,476	141	\$ 65,216	1	\$ 260		\$	217	101
Cigar Manufacturing	1	5,000	6	6,240	6	6,240					11	5
Cotton Gin	1	3,000	4	48	4	48					4	4
Lumber Manufacturers	2	8,000	20	12,000	20	12,000					37	15
Naval Stores	4	265,000	93	87,570	93	87,570					128	72
Novelty Works	1	3,500	2	2,400	2	2,400					3	1
Manufacture of Extract (Medicinal)	1	250	2	468	1	208	1	260			2	1
Shingle Mill	1	3,000	15	6,750	15	6,750					32	3

ST. JOHN COUNTY.

Grand Total	85	\$ 885,835	577	\$ 482,507	506	\$ 453,475	68	\$ 28,736	3	\$ 1,436	669	542
Bicycle Repair Shops	5	11,000	8	8,384	7	7,782	1	662			9	8
Bottling Works	2	14,500	9	9,500	6	7,500	3	2,000			6	6
Bakeries	2	17,250	0	10,000	8	8,840	1	1,250			12	9
Blacksmith Shops	4	1,700	7	7,532	7	7,532					0	7
Boat Builders and Repairers	2	2,000	4	6,180	4	6,180					4	4
Barrel Factories	2	58,000	63	23,226	63	28,028					73	63
Cigar Manufacturers	1	50,000	64	47,670	55	44,779	8	240	1	500	96	64
Cabinet Manufacturers	2	1,500	3	3,750	3	3,750					3	3
Manufacturers Cement Blocks and Fences	2	1,500	5	5,720	5	5,720					6	5
Contractors and Builders	2	17,000	41	41,860	41	41,360					56	41
Coopering	1	450	4	5,000	4	5,900					4	4
Cross Tie Contractor	1	300	6	3,744	0	3,744					6	6
Dressmaking	5	5,120	35	23,184	35	23,184					37	34
Auto Garages and Repairs	3	66,250	29	32,120	20	30,884	1	1,300	2	936	30	27
Furniture Makers and Repairers	3	650	4	3,850	4	3,850					5	4
Grist Mills	2	400	2	2,080	2	2,080					2	2
Harness Makers and Repairers	2	3,800	4	4,108	4	4,108					5	4
Hat Cleaner and Repairer	1	50	1	1,040	1	1,040					1	1
Ice Factories and Cold Storage	2	39,600	21	45,388	21	45,388					21	21
Printing Plants	4	102,550	51	61,162	33	60,230	18	11,232			51	46
Jelly Manufacturers	2	1,550	3	610	3	610					3	2
Lighting Plants and Power House	2	327,000	56	41,972	55	41,192	1	780			59	56
Laundries	3	7,000	44	14,472	11	6,108	33	8,364			24	24
Millinery Shops	2	7,880	14	13,884	14	13,884					17	12
Novelty Mill	2	4,000	4	3,372	4	3,372					4	4
Plumbing Shop and Repairing	2	700	3	3,575	3	3,575					4	3
Planing Mill	1	4,000	3	2,808	3	2,808					3	3
Shoe Makers and Repairers	2	3,100	7	8,960	7	8,960					8	7
Soap Manufacture	1	150	1	1,300	1	1,300					1	1
Sewing Machine Repair Shops	2	750	2	2,500	2	2,500					3	2
Tailoring and Repair Shops	4	2,375	18	14,726	17	14,258	1	468			20	18
Tin Shop	1	500	1	1,250	1	1,250					2	1
Naval Stores	3	33,000	40	18,720	40	18,720					65	40
Vulcanizing Plant	1	500	2	1,500	1	1,000	1	500			2	2
Vegetable Canning Plant	1	300	1	2,000	1	2,000					1	1
Water Works	1	100,000	8	5,760	8	5,760					8	8

Grist Mills	56,025	56,025												
Tin Shops	5,830	7,900												
Plumbing and Repair Shop	5,800	7,250												
Bicycle and Repair Shops	7,100	9,800												
Millinery Shops	22,800	47,850												
Bakeries	58,500	91,500												
Jewelry Shop	7,100	14,400												
Shoe Shop and Repairs	5,800	8,325												
Fertilizer Plants	8,000	9,000												
Printing Plants	68,500	83,200												
Laundries	8,350	10,650												
Gunsmith	1,000	1,500												
Furniture Repair Shop	8,800	10,250												
Cabinet Shop	75,000	100,000												
Bottling Works	15,000	30,500												
Vulcanizing and Repairing	20,000	36,000												
Wagon Mfg and Repairs	10,000	18,000												

BAKER COUNTY.

Grand Total	\$ 114,100	\$ 62,850	197,000	\$ 140,560	16,750	\$ 237,000				1,850	\$ 16,500
Saw Mills	69,000	87,200									
Naval Stores			197,000	140,560	16,750	237,000				1,850	16,500
Cotton Gins	2,000	6,050									
Cooper Shops	17,100	13,700									
Corn Mills	10,000	18,700									
Blacksmith Shop	2,000	4,000									
Shingle Mills	9,000	11,500									
Garages	1,000	1,000									
Tailors	3,000	4,000									
Millinery Shops	1,000	4,000									
Planing Mills											

BAY COUNTY.

Grand Total	\$ 1,246,225	\$ 1,500,750	412,300	\$ 94,320	15,520	\$ 106,860					
Bottling Works	8,900	10,000									
Blacksmiths	8,800	10,650									
Bakery	5,800	7,500									
Boat Repairing	4,300	5,850									
Brick Kiln	2,800	5,850									
Cooperage Shops	13,375	12,025									
Canneries	1,500	2,300									
Dry Kilns	30,000	39,000									
Cross Ties	24,200	34,400									
Electric Plants	16,200	20,575									
Grist Mills	2,350	2,800									
Feed Mills	800	800									
Ice Factories	6,400	9,000									
Ice Cream Mfg	1,400	2,200									
Laundry	2,600	3,300									
Machine Shops	10,200	12,200									
Marine Ways	3,800	5,200									
Millinery Shops	9,400	11,150									
Novelty Works	3,000	4,100									
Naval Stores			412,300	94,320	15,520	106,860					
Plumbing and Repairs	3,300	4,200									
Planing Mills	74,800	91,200									
Rice Cleaner	700	900									
Shingle Mills	24,650	32,800									
Ship Building	100,000	125,000									
Saw Mills	807,550	1,020,100									
Repair Shops	14,500	24,550									
Tailor Shops	1,500	2,000									
Tinner	1,200	1,500									

BRADFORD COUNTY.

Grand Total	40,000	20,000	\$ 260,136	\$ 390,464	185,790	\$ 73,190	11,889	\$ 89,951			4,200	\$ 1,141,120
Naval Stores					185,790	73,190	11,889	89,951				
Cooperage			9,211	12,470								
Shingle Mills			1,500	2,300								
Saw Mills			68,000	107,600								
Broom Factory			450	500								
Cigar Factory	40,000	20,000										
Shoe Repair			2,600	3,400								
Blacksmith Shop			24,200	46,750								
Plow Factory			1,500	3,500								
Garages			13,800	19,500								
Grist Mills			5,610	10,695								
Feed Mills			925	1,300								
Rice Mills			300	450								
Bean Hoppers			150	200								
Cross Tie Mfgs			43,970	63,500								
Logging			35,000	50,000								

COLUMBIA COUNTY.

Grand Total	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Blacksmith Shops	1,040	2,420												
Shoe Shops	1,100	3,100												
Naval Stores														
Cotton Gins														
Saw Mills	3,600	4,800												
Grist Mills	85	200												
Wood Mills	50	200												
Machine Shop	0,000	0,000												
Miscellaneous	800	1,500												
Canning Manufacturer	1,100	8,022												

BADE COUNTY.

Grand Total	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Light and Power Co	300,000	10,000												
Electrical Repair														
Machine Shops														
Quarry														
Stone Works														
Dredging														
Irrigation and Installation														
Gas Manufacturing														
Fisheries														
Building Contractor														
Blacksmiths														
Road Building														
Foundry and Mch Wks														
Cigar Manufacture	300,000	10,000												
Painters and Trimmers														
Motorcycle Repair														
Vulcanizing														
Water Works Co.														
Garages														

DeSoto COUNTY.

Grand Total	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Asphalt Plants	720,000	21,600												
Dock Building														
Bakeries														
Bicycle Repair														
Bottling Works														
Cooperage														
Cigar Factory	720,000	21,600												
Canning Factory														
Electric Plants														
Fisheries														
Garages														
Grist Mills														
Cotton Gins														
Irrigation Plants														
Ice Plants														
Jewelry Repairs														
Ladder Factories														
Laundries														
Millinery														
Naval Stores														
Pressing Clubs														
Plumbing														
Planing Mills														
Packing Houses														
Printing Works														
Blacksmith and Repairs														
Veneering														
Saw Mills														
Cross Ties														
Vulcanizing														
Well Drilling														
Rice Mills														
Feed Mills														
Syrup Manufacturing														

DUVAL COUNTY.

Grand Total	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Automobile Repairs	3,170,600	692,797												
Bicycle Repairs														
Bakeries														
Bottling Works														
Blacksmith														
Broom Factories														
Bag Factories														

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valu- ing Manufactured To- bacco or Naval Stores.		Turpentine.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin, This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (In- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
BRADFORD COUNTY—Cont.														
Cord Wood					0,300	15,950								
Ice and Cold Storage					4,660	6,500								
Jeweler and Repair					15,000	25,000								
Canning Factories					4,800	9,580								
Cotton Gins					15,270	20,269							4,290	114,120
BREVARD COUNTY.														
Grand Total		\$		\$	584,114	658,915	20,450	8,180	1,150	6,900				
Cooperage					6,000	8,000								
Fisheries					79,553	88,185								
Saw Mills					408,437	406,219								
Machine Shops					75,104	79,511								
Naval Stores							20,450	8,180	1,150	6,900				
Automobile Repairs					15,000	17,000								
BROWARD COUNTY.														
Grand Total	40,000	\$	1,400	\$	250,700	260,650								
Bicycle Repairs					8,300	13,400								
Blacksmith Shop					7,900	10,500								
Boat Building					12,500	16,000								
Cigar Factory	40,000	1,400			25,100	40,300								
Garages					3,000	5,500								
Machine Shops					1,700	3,000								
Millinery					100	150								
Picture Frame Works					63,000	79,500								
Saw Mills					7,800	9,000								
Bottling Works					1,600	2,800								
Fin Shops					45,000	67,000								
Canning Factory					9,000	12,500								
Novelty Works														
CITRUS COUNTY.														
Grand Total		\$		\$	76,058	98,900							428	107,000
Repair Shop					970	1,500								
Garages and Repair Shop					4,000	6,300								
Crate Factory					50,088	60,500								
Cotton Gin					6,520	8,500							428	107,000
Packing House					6,500	16,000								
Ice and Light Plant														
CALHOUN COUNTY.														
Grand Total		\$		\$	375,506	465,662	326,350	116,996	19,952	162,828	225	39,750		
Brick Kilns					3,000	4,000								
Blacksmith Shops					320	600								
Cotton Gins					660	800								
Grist Mills					1,625	3,412					225	39,750		
Ice Factories					3,200	4,400								
Repair Shops					820	2,000								
Saw Mills					365,881	450,450								
Naval Stores							326,350	116,996	19,952	162,828				

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in val- ing Manufactured To- bacco or Naval Stores.		Turpentine.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (Including Mill or Mine Supplies and Fuel).	Value of Work (In- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
DUVAL COUNTY—Cont.														
Clothes Repairers					49,800	84,400								
Concrete Works					205,000	250,000								
Cigar Manufacturers	3,170,000	602,597												
Candy Manufacturer					24,000	28,500								
Cracker Manufacturers					154,500	185,000								
Contractors					18,000	26,000								
Cotton Oil Products					960,400	1,340,000								
Cabinet Makers					21,800	36,100								
Coffin Manufacturers					3,000	4,000								
Carriage Manufacturers					119,700	166,000								
Dressmaking					31,900	54,100								
Distillation Pine Products					285,000	304,000								
Dying and Cleaning Wks					34,300	54,300								
Electrical Construction					90,000	130,000								
Engineering & Construct'n					80,000	100,000								
Fertilizer Manufacturers					3,927,410	4,729,638								
Horse Shoeing					21,900	32,200								
Harness Mfg & Repairing					11,500	15,000								
Hot Manufacturers					38,950	67,850								
Ice Manufacturers					229,700	306,000								
Jewelry Repairing					76,040	105,260								
Laundries					274,100	362,650								
Locksmith					5,600	8,500								
Millinery					66,700	108,400								
Machine Shops					446,300	600,500								
Mattress Manufacturing					6,800	11,000								
Machine Repair Shops					13,600	14,350								
Metal Products					175,000	220,000								
Monument Mfgs.					41,600	67,000								
Musical Repair Shops					1,200	2,500								
Mirror Plating					2,500	4,500								
Novelty Works					1,800	3,000								
Picture Frames Mfgs					10,000	19,000								
Papering and Painting					48,000	67,000								
Photographers					22,000	34,200								
Newspaper Publishers					388,500	556,000								
Plumbers					85,400	138,500								
Printers					244,800	388,100								
Ostrich Plumes and Farm					8,000	18,000								
Painters					15,700	23,800								
Tuners					48,600	73,000								
Tailors					93,100	120,300								
Naval Stores							98,700	44,850	5,807	59,570				
Tent and Awning Mfgs					21,000	30,000								
Trunk Manufacturers					2,000	3,000								
Roofing Company					12,000	24,000								
Saw Mills					1,389,504	1,763,978								
Ship Builders					70,000	118,000								
Syrup Manufacturers					35,000	45,000								
Shoe Repairing					94,900	153,400								
Show Case Mfgs					30,000	40,000								
Bed Spring Mfgs					98,800	118,400								
Umbrella Manufacturer					38,000	60,000								
Well Drillers					7,000	9,000								
Upholsterers					26,400	46,000								
Planing Mills					229,400	323,400								
Shingle Mills					52,500	39,400								
Pressing, Repair'g, Clean'g					34,300	54,200								
Sign Painters					15,700	23,800								

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Grand Total	\$.	\$.	\$ 158,062	\$ 278,385	48,900	\$ 26,300	3,251	\$ 33,160	1,322	\$ 166,000
Blacksmith Shops			21,100	35,675						
Cotton Gin									1,322	166,000
Rice Factory			5,000	8,200						
Planing Mills			7,000	10,600						
Syrup Works			31,310	45,510						
Saw Mills			95,500	143,400						
Shingle Mills			18,000	30,100						
Turpetine Stills					48,900	26,300	3,251	33,160		
Grist Mills			6,100	13,100						

LAFAYETTE COUNTY.

LAKE COUNTY.

LEE COUNTY.

Grand Total	\$	\$	\$	214,848	\$	258,080	\$	\$	\$	\$	\$
Marine Ways & Mch Shops			50,000	90,000							
Storage Battery Plant			650	1,500							
Cigar Manufacturers			600	3,400							
Blacksmith Repair Shop			5,000	9,500							
Electric Shoe Shop			1,500	3,000							
Shoe Harness & Sgd. Mfg.			500	1,000							
Bicycle Shop			1,000	8,500							
Saw Mills			5,000	12,000							
Tailor Shop			750	1,500							
Candy & Ice Cream Mfg			400	750							
Lumber Yd & Novelty Wks			2,500	5,000							
Garages			11,448	18,000							
Ice and Electric Plants			27,500	25,000							
Wagon Works			27,500	55,000							
Fibre Company			2,000	9,800							
Clam Packers			103,000	140,000							

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valu- ing Manufactured To- bacco or Naval Stores.		Turpenline.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (in- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
HERNANDO COUNTY.														
Grand Total		\$		\$	\$ 548,000	\$ 740,500		\$		\$		\$		\$
Saw Mills					493,000	678,000								
Naval Stores					55,000	62,500								
Electric Light & Ice Mfg.														
Garages														
Feed and Grist Mills														
Blacksmiths														
Repair Shops														
HILLSBOROUGH COUNTY.														
Grand Total	415,154,000	\$27,609,055	7,809,000	\$ 154,000	\$11,762,937	\$80,127,549	62,400	\$ 36,000	3,550	\$ 45,000		\$		\$
Bakeries					273,838	670,952								
Bicycles and Motorcycles					54,874	118,880								
Blacksmiths					93,916	196,900								
Bottling Works					80,770	108,200								
Box Factories					582,000	968,250								
Candy Manufacturers					91,020	176,800								
Cement Contractors					204,000	560,400								
Cigar Factories	415,154,000	27,609,055	7,809,000	154,000										
Coal Burners					30,936	57,354								
Coffee Grinders					193,714	504,000								
Cross Tie Mfgs					96,176	300,007								
Dressmakers					24,938	121,382								
Electricians					68,500	117,000								
Furniture Repairs					21,130	69,600								
Garage Repairs					701,085	1,584,884								
General Contractors					1,450,800	3,568,410								
Grist Mills					17,400	51,200								
Harness Makers					12,360	24,820								
Ice Cream Mfgs					92,172	273,315								
Ice Factories					418,085	2,591,272								
Jewelers & Watch Reprs					116,490	238,548								
Job Print & Book Bndrs					163,329	289,327								
Laundries					253,400	478,646								
Macaroni Factories					47,960	114,992								
Machine & Iron Works					305,200	676,706								
Markets—Mfg Dept					90,846	237,468								
Milliners					60,250	122,870								
Miscellaneous Mfg					2,055,691	4,145,994								
Naval Stores							62,400	\$ 36,000	3,550	\$ 45,000				
Novelty Works					47,000	109,800								
Opticians					15,300	27,100								
Photo Print Works					47,720	87,360								
Plumbers					135,390	256,400								
Rubber Tire Works					98,120	229,875								
Saw Mills					1,612,240	6,066,880								
Ship Bldg & Marine Ways					1,612,300	3,087,200								
Shoe Makers & Reprs					87,180	179,515								
Tailor's, Clean'g & Repr'g					287,430	542,110								
Water Works					82,100	242,500								
Wood Yards					135,090	281,784								
HOLMES COUNTY.														
Grand Total		\$		\$	\$ 347,738	\$ 9,239,510	14,950	\$ 8,897	1,552	\$ 19,995		\$		\$
Auto Repair Shops					4,050	3,500								
Blacksmith Shops					2,050	8,800								
Grist Mills					18,821	42,812								
Naval Stores							14,950	\$ 8,897	1,552	\$ 19,995				
Saw Mills					321,817	9,187,339								

MANATEE COUNTY.

Grand Total	\$	\$	\$	\$ 220,100	\$ 723,100	135,000	\$ 45,000	5,400	\$ 22,500	\$	\$	\$
Auto Repair Shops				17,000	37,000							
Blacksmith and Repairs				35,500	97,300							
Planing Mill				5,000	10,000							
Light & Power Plants				30,000	40,000							
Saw Mills				71,000	440,000							
Naval Stores						135,000	45,000	5,400	22,500			
Rice Mill				2,000	10,000							
Irrigation Plant				15,000	40,000							
Concrete Manufacturers				2,500	9,800							
Sheet Metal & Plumb Shop				11,000	18,000							
Electrical & Rubber Wks				1,200	3,000							
Grapefruit Juice Mfg				3,000	6,000							
Mfgs Palmetto Brushes				4,000	7,000							
Ship Building				1,200	3,000							
Canning Factory				700	2,000							

MARION COUNTY.

Grand Total	225,000	\$ 10,000	\$	\$ 1,201,320	\$ 1,420,115	134,000	\$ 79,000	6,700	\$ 41,200	77	\$ 8,425	1,860	\$ 430,800
Saw Mills				176,000	215,700								
Naval Stores						134,000	79,000	6,700	41,200				
Crates & Basket Factories				180,000	235,000								
Grist Mills				59,100	87,725					77	8,425	1,860	430,800
Cotton Gins													
Bean & Peanut Huller				12,850	16,850								
Foundry & Mach Shop				108,000	137,000								
Blacksmith and Repairs				26,100	34,640								
Lime Kiln Companies				129,000	153,000								
Garages, Sale and Repairs				74,000	118,200								
Ice Plant & Cold Storage				43,500	58,000								
Gas Plant				25,000	35,000								
Knitting Mills				85,000	110,500								
Packing Houses (fruit)				82,200	108,200								
Peanut Butter Factory				2,200	3,000								
Plumb'g & Electric Shops				22,800	26,900								
Cigar Factories	225,000	10,000											
Printing Shops				12,500	19,700								
Tailoring & Pressing Shops				5,000	5,000								
Laundry Companies				17,300	20,350								
Jewelry and Repairing				7,170	9,450								
Shoe Shop & Repairing				5,100	8,350								
Bottling Works				20,000	32,400								
Barrel Factory				12,000	17,000								
Sash, Door & Lbr Factory				33,000	43,900								
Metal Works & Repairing				2,500	3,000								
Mattress Mfg Co				100	200								
Vulcanizing & Repairing				8,100	11,200								
Millinery Shops				7,000	10,280								
Vegetable Canning Factory				32,000	36,000								
Gunsmith Shop				1,000	1,500								
Fish Packing House				11,000	12,000								

MONROE COUNTY.

Grand Total	42,293,802	\$ 1,450,808	\$	\$ 311,583	\$ 365,737	\$	\$	\$	\$	\$	\$	\$
Cigar Manufacturers	42,293,802	1,450,808										
Cigar Box Factory				187,000	220,000							
Ice Factory				98,083	108,737							
Cann'g Factory (turtle soup)				8,000	14,000							
Iron Foundry				18,500	28,000							

NASSAU COUNTY.

Grand Total	\$	\$	\$	\$ 60,938	\$ 104,900	108,000	\$ 60,900	4,100	\$ 24,600	\$	\$	\$
Auto Repair				1,000	3,200							
Brick and Tile Mfgs.				1,500	4,500							
Bottling Works				1,200	3,500							
Blacksmith Shop				1,100	2,000							
Cannery Company				1,500	6,000							
Grist Mills				1,000	2,200							
Saw Mills				53,638	83,500							
Naval Stores						108,000	60,900	4,100	24,600			

OKEECHOBEE COUNTY.

Grand Total	\$	\$	\$	\$ 440,280	\$ 744,500	632	\$ 19,000	1,900	\$ 38,000	\$	\$	\$
Naval Stores						632	19,000	1,900	38,000			
Blacksmith Shop				1,180	2,600							
Bottling Works				2,000	4,600							
Fish Packers				14,400	23,600							
Fruit Packing House				101,000	126,000							
Ice & Electric Light House				14,000	201,000							
Saw Mills				24,500	40,200							
Boat Bldg and Repairing				27,000	50,000							
Wagon Works and Repairs				1,600	2,100							

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valu- ing Manufactured To- bacco or Naval Stores.		Turpentine.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (In- cluding Custom Work and Repara- tion).	Gallons.	Value.	Barrels.	Value.				
LEON COUNTY.														
Grand Total		\$		\$	\$ 744,882	\$ 1,379,824	144,200	\$ 147,868	9,534	\$ 94,482	1,771	\$ 176,000		\$
Anlo Repair Shops					31,550	46,060								
Basket Factories					60	150								
Blacksmith Repair Shops					7,772	13,615								
Bakeries					4,800	8,000								
Broom Factory					400	500								
Bee Keepers' Supplies					400	600								
Cheero-Cola Plant					10,000	13,000								
Candy Factories					1,500	2,900								
Collar Factories					45	125								
Cotton Gins					3,176	6,201					1,771	176,000		
Cane Mills					25,030	43,911								
Cross Ties					26,100	50,050								
Cigar Manufacturers					75	1,400								
Cooper Shops					10,000	11,500								
Foundry					15,715	80,995								
Grist Mills					60,000	100,000								
Ice Plant					10,200	11,500								
Laundry					135,200	360,462								
Lumber Companies					800	1,500								
Monument Company					240	600								
Mattress Making					4,500	10,000								
Metal Works														
Naval Stores					150,000	200,000	144,200	147,868	9,534	94,482				
Oil Mill					4,000	6,500								
Pressing Clubs					7,375	10,000								
Tobacco Packer					1,000	1,500								
Paint Shop					2,150	3,700								
Photographers					52,500	68,500								
Printing Shops					48,800	115,000								
Planing Mills					63,900	112,000								
Saw Mills					4,300	5,400								
Shoe Repairing					150	225								
Upholstering					4,625	9,150								
Wagon Factories					2,760	3,840								
Wood Yards					52,000	73,000								
Water, Gas & Electricity														
LIBERTY COUNTY.														
Grand Total		\$		\$	\$ 718,450	\$ 924,800	303,050	\$ 335,996	19,502	\$ 158,054		\$		\$
Blacksmith & Rep Shops							303,050	335,996	19,502	158,054				
Naval Stores					718,100	923,000								
Saw Mills					350	500								
Grist Mills														
MADISON COUNTY.														
Grand Total		\$		\$	\$ 163,071	\$ 322,838	65,850	\$ 498,380	4,045	\$ 34,410		\$		\$
Shoe Shops					510	1,020								
Shingle Mills					18,840	77,100								
Saw Mills					137,100	226,800								
Naval Stores							62,850	498,380	4,045	34,410				
Grist Mills					2,921	7,878								
Blacksmith Shops					1,020	3,435								
Cooper Shops					3,400	6,800								

PALM BEACH COUNTY.

Grand Total	51,500	\$ 25,750	\$	\$ 589,975	\$ 744,830	\$	\$	\$	\$	\$	\$	\$
Cleaners and Pressers				22,950	32,550							
Blacksmith and Repairs				43,500	22,350							
Shoemakers and Repairs				9,000	13,450							
Auto and Bicycle Repairs				70,050	80,000							
Boat Builders				24,150	33,500							
Saw Mills				32,000	40,200							
Fish Packers				235,175	265,000							
Gas Plant				18,000	28,000							
Upholstery Plant				2,000	2,850							
Ice Cream Mfgs.				4,500	7,500							
Novelty Works				29,000	45,000							
Dressmaking Establishm't				13,600	18,000							
Concrete Works				7,900	10,800							
Laundries				6,800	12,800							
Bakeries				23,100	28,800							
Bottling Works				8,150	11,800							
Cigar Manufacturers	51,500	25,750		10,350	23,500							
Machine Shops				38,700	43,700							
Plumbing and Repairs				10,850	16,500							
Sheet Metal Works												

TASCO COUNTY.

Grand Total	24,000	2,200	\$	\$ 3,342,175	\$ 4,518,850	310,000	\$ 178,000	16,800	\$ 29,600	550	\$ 57,500	1,500	\$ 350,000
Blacksmith Shops				16,200	20,000					550	57,500	1,500	350,000
Cotton Gins				154,000	345,000								
Irrigation Works				20,375	18,850								
Cane Mills				10,800	17,000								
Grist Mills				13,000	20,000								
Newspapers and Printing				15,000	80,000								
Packing Houses				4,000	6,000								
Piling				1,000	2,000								
Photographers						310,100	178,000	16,800	29,600				
Naval Stores				150,000	200,000								
Tobacco Company				2,920,000	3,733,000								
Saw Mills				12,000	20,000								
Canning Factory				2,000	20,000								
Construction Company				2,000	4,000								
Concrete Works				1,500	2,400								
Silos													
Cigar Factory	24,000	2,200		4,000	10,000								
Coal Burners				13,300	25,000								
General Repair Shops													

PINELLAS COUNTY.

Grand Total	475,000	\$ 16,680	\$	\$ 457,000	\$ 618,535	8,945	\$ 6,000	670	\$ 5,300	\$	\$	\$
Garage and Auto Repairing				42,000	83,500							
Cement Block Mfg				22,000	30,000							
Bicycle Shop and Repairs				6,300	8,400							
Blacksmith Shop and Repairs				2,500	5,000							
Cigar Manufacturing	475,000	16,680		13,440	19,635							
Cleaning & Pressing Shops				40,000	50,000							
Fruit Packing House				227,500	263,000							
Novelty Mills				56,000	75,000							
Ice Manufacturing						8,945	6,000	670	5,300			
Naval Stores				41,000	70,000							
Saw Mills				3,450	12,900							
Shoe Shop and Repairs												

POLK COUNTY.

Grand Total	45,600	\$ 17,160	\$	\$ 483,260	\$ 714,375	\$	\$	\$	\$	\$	\$	\$
Cigar Manufacturing	45,600	17,160		8,500	9,500							
Bottling Works				900	1,200							
Repair Shop				39,800	46,875							
Garage and Repair Shops				16,000	22,000							
Ice Manufacturing				25,000	34,200							
Grapefruit Juice Mfg				80,000	115,500							
Shingles Manufacturing				290,000	459,000							
Lumber Manufacturing				14,000	30,000							
Ice and Lights												

PUTNAM COUNTY.

Grand Total	65,000	\$ 13,000	\$	\$ 2,324,180	\$ 3,913,000	100,500	\$ 91,950	14,300	\$ 92,700	\$	\$	\$
Cross Tie Mfg				193,400	285,800							
Cleaning and Pressing				2,000	24,000							
Bakeries				11,200	22,000							
Cigar Manufacturing	65,000	13,000		18,700	51,000							
Wood Yards				10,500	21,000							
Steam Laundries				670,000	1,644,000							
Lumber Manufacturing				24,000	51,000							
Bottling Works				7,000	12,500							
Photographers				4,000	10,000							
Novelty Works				4,500	8,000							
Bicycle Repair Shops				600	1,100							
Locksmithing												

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valuing Manufactured Tobacco or Naval Stores.		Turpentine.		Resin.		Number of Bales of Upland Cotton Ginned at This Gln This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gln This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (In- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
OKALOOSA COUNTY.														
Grand Total		\$		\$	\$ 101,757	\$ 140,241	56,000	\$ 28,075	3,525	\$ 28,075	205	\$ 26,750		\$
Naval Stores					44,500	50,830	56,000	28,075	3,525	28,075				
Grist Mills					1,745	3,295								
Saw Mills					59,708	84,820								
Cotton Gins					204	396					205	26,750		
Blacksmith Shop					800	800								
ORANGE COUNTY.														
Grand Total	2,838,200	\$	94,849	\$	\$ 1,303,587	\$ 2,109,301	68,900	\$ 29,060	4,396	\$ 28,487				\$
Auto Painting					3,640	3,640								
Bakeries					70,000	78,000								
Blacksmith Shops					5,800	7,650								
Broom Factory					2,780	4,000								
Carriage and Wagon Mfg.					17,775	26,000								
Candy Factory					7,000	8,500								
Canning Factory					7,980	8,312								
Cigar Manufacturers	2,838,200		94,849											
Elec. Ice Gas & Water Plts					131,096	199,508								
Foundry & Metal Wks					100,000	122,000								
Fertilizer Companies					42,000	45,000								
Garage and Rep Shops					70,900	93,625								
Grist Mill					800	800								
Harness Shop					1,800	3,500								
Insecticide Companies					15,250	25,250								
Laundries					40,000	48,000								
Marble & Cement Wks					2,700	4,000								
Orange Packing House					967,900	894,400								
Orange Picking Bags					2,100	2,200								
Bicycle and Repairing					0,100	10,800								
Printing Shops					52,394	61,097								
Plumbing and Repairing					45,000	46,900								
Photographer					3,000	4,000								
Saw Mills					206,211	222,521								
Shoe Repairing					0,600	11,810								
Sprayers and Rep Work					25,817	26,817								
Bottling Works					20,764	21,681								
Tailors and Pressing					10,800	12,700								
Naval Stores							68,900	29,060	4,396	28,487				
Vulcanizing and Repairs					10,200	12,000								
Wood Supply Co					3,880	4,500								
OSCHOLA COUNTY.														
Grand Total		\$		\$	\$ 281,075	\$ 410,700								\$
Blacksmith Shops					3,000	4,000								
Concrete Factories					5,000	7,000								
Wheelright and Repairs					2,400	3,500								
Millinery Shops					3,200	3,200								
Cigar Manufacturers					6,000	8,200								
Ice Manufacturers					1,500	7,500								
Electric Plant					30,000	70,000								
Boat Repairing					18,800	37,000								
Saw Mills					6,075	8,200								
Repair Shops					132,000	180,500								
Painting Shops					48,500	75,300								
					27,000	35,000								

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valuing Manufactured Tobacco or Naval Stores.		Turpentine.		Rosin.		Number of Bales of Upland Cotton Ginned at This Gln This Year.	Value.	Number of Bales of Sea Island Cotton Ginned at This Gln This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (including Mill or Mine Supplies and Fuel).	Value of Work (in- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
PUTNAM COUNTY—Cont.														
Auto Repair Shops					30,000	42,000								
Marine Ways					22,000	58,000								
Shoe Repair Shops					16,500	29,700								
Auto Shipping Blocks					8,500	18,500								
Millinery Establishments					22,400	47,800								
Furniture Repairs					8,600	16,000								
Garages					10,000	23,600								
Dressmaking					20,250	54,000								
Plumbing & Tin Shops					10,500	30,000								
Concrete Block Mfg					8,000	22,000								
Blacksmith Shops					21,000	58,000								
Shingle Mills					30,000	75,000								
Barrel & Staves Mfg					84,000	125,000								
Packing Houses					75,130	100,000								
Cypress Tanks					65,000	85,000								
Buckets and Tubs Mfg					80,000	120,000								
Job Printing					8,800	19,000								
Ice Cream Mfg					7,500	17,000								
Machine Shops					73,000	112,000								
Naval Stores							162,500	81,250	10,300	92,700				
Window, Frames & Screens					3,400	6,800								
Sewing Machine Reprs					1,500	1,900								
Cabinet Makers					2,000	3,000								
Boilermakers & Repairs					63,000	101,000								
Harness Shop & Repairs					400	1,200								
Electrical Work					8,000	17,000								
Grist Mills					1,200	1,900								
Dry Docks					350,000	500,000								
Gas Plant					12,000	22,000								
Electric Light Plant					10,000	25,000								
Ice Plant					20,000	32,000								
Water Works					15,000	26,000								
SANTA ROSA COUNTY.														
Grand Total		\$		\$	\$ 531,351	\$ 610,302	133,750	\$ 47,620	6,270	\$ 56,230	20	\$ 8,000		\$
Saw Mills					415,460	453,360								
Printing Shops					8,150	10,280								
Shoe Repairing Shops					2,800	2,800								
Blacksmith Shops					2,700	3,300								
Naval Stores							133,750	47,620	6,270	56,230				
Jewelry and Repairing					1,000	2,000								
Ship Building					75,000	109,000								
Electricity and Sewerage					5,200	5,400								
Bottling Works					2,000	2,100								
Shingle Mills					5,400	8,200								
Grist Mills					2,400	2,600								
Cane Mills					1,241	2,182								
Cotton Gln														
Feed Mill					10,000	11,000					20	8,000		
SEMINOLE COUNTY.														
Grand Total	500,000	\$ 18,500		\$	\$ 40,001	\$ 57,080	58,036	\$ 22,508	3,759	\$ 30,072	75	\$ 13,000		\$
Cigar Manufacturing	500,000	18,500												
Cotton Gln											75	13,000		
Lumber Mfg					27,200	38,800								
Naval Stores							58,036	22,508	3,759	30,072				
Novelty Works					5,000	6,000								
Mfg of Rat'et (medicinal)					312	780								
Shingle Mills					7,495	11,500								

TABLE NO. 3 (SECOND HALF)—MANUFACTURES—BY COUNTIES.—(Continued).

NAME OF BUSINESS, MANUFACTURE OR PRODUCT.	TOBACCO MANUFACTORIES.				Cost of Material and Value of Products.		NAVAL STORES.				GINNERIES AND PRODUCTS.			
	Character of Product.				These columns must not be used in valu- bacco or Naval Stores. bacco or Naval Stores.		Turpentine.		Resin.		Number of Bales of Upland Cotton Ginned at This Gin This Year.	Value.	Number of Bales of Sea Is- land Cotton Ginned at This Gin This Year.	Value.
	Number Cigars.	Value.	Number Cigarettes.	Value.	Cost of Production and Material Used (Including Mill or Mine Supplies and Fuel).	Value of Work (In- cluding Custom Work and Repair- ing).	Gallons.	Value.	Barrels.	Value.				
VOLUSIA COUNTY.														
Grand Total					\$ 1,500,440	\$ 3,519,820	60,500	\$ 34,450	3,310	\$ 62,500				
Saw Mills					717,000	1,633,000								
Naval Stores						230,200	60,500	34,450	3,310	62,500				
Cross Ties					67,000	8,900								
Tire Repairers					2,500	8,900								
Light, Ice & Pwr House					204,225	262,320								
Water Power					12,300	41,700								
Auto Repair Shops					69,500	105,700								
Auto Painting Shops					6,000	19,400								
Printing Shops					45,010	139,503								
Blacksmith Shops					5,255	17,000								
Shoe Repair Shops					11,400	26,600								
Novelty Works					35,050	93,700								
Cleaning & Pressing Shops					3,370	31,150								
Plumbing and Repairing					37,600	91,700								
Bakeries					37,100	67,500								
Watch Repairing					2,275	10,400								
Laundries					8,105	42,300								
Bicycle Repair Shops					9,550	25,700								
Ice Cream Mfgs					10,000	39,250								
Sheet Metal Works					17,100	37,900								
Dressmaking Establishments					5,680	15,485								
Millinery Shops					26,250	45,700								
Hay Drying					34,000	119,000								
Bottling Works					13,800	31,800								
Mfgs Preserves & Jellies					8,500	25,700								
Boat Building & Repairs					20,700	65,200								
Paper Hanging					4,500	12,400								
Cement Contractors					39,000	78,000								
Grist Mills					780	1,100								
Upholstering					2,500	7,500								
Miscellaneous Industries					24,470	101,010								
WAKULLA COUNTY.														
Grand Total					\$ 28,634	\$ 42,707	92,000	\$ 33,322	5,942	\$ 61,613				
Naval Stores							92,000	33,322	5,942	61,613				
Saw Mills					21,232	32,800								
Cooper Shops					277	522								
Blacksmith Shops					4,450	5,795								
Shoe Repair Shops					500	700								
Grist Mills					975	1,550								
Saw Mills					1,100	1,400								
WALTON COUNTY.														
Grand Total					\$ 444,112	\$ 1,001,725	504,450	\$ 186,828	33,250	\$ 323,280				
Grist Mills					6,370	10,800								
Naval Stores							504,450	186,828	33,250	323,280				
Blacksmith Repair Shops					4,824	7,825								
Saw Mills					433,138	983,100								
WASHINGTON COUNTY.														
Grand Total					\$ 420,170	\$ 618,900	275,956	\$ 197,927	19,815	\$ 169,695	400	\$ 60,000		
Naval Stores							275,956	197,927	19,815	169,695				
Blacksmith Shops					8,550	7,800								
Grist Mills					1,100	2,800								
Saw Mills					352,547	568,000								
Brick Manufacturing					3,600	4,000								
Bottling Works					2,000	5,000								
Packing Plant					50,000	80,000								
Cleaning and Milling					2,300	4,000					400	60,000		
Saw and Grist Mill					425	1,200								